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ABSTRACT

The fourth in a series of federally supported modules for training paraprofessional school personnel who work with students with disabilities, this module presents principles and techniques of behavior management. Both a facilitator's edition and a student's edition are provided. Chapter 1 introduces the concept of behavior and the role of the consequences and antecedents in the environment. Chapter 2 offers guidelines on creating positive learning experiences. It also discusses development of a positive reinforcement plan and common questions about reinforcement techniques. An overview of challenging behavior is given in Chapter 3. The cost-benefit analysis of changing behavior and the three-factor theory are discussed. Chapter 4 focuses on alternatives to challenging behaviors, including overcoming avoidance. Chapter 5 gives guidance on using behavioral interventions with students and what to do in an emergency. An appendix defines and explains the appropriate use of controlled or regulated procedures (such as use of restraints, or temporary delay of meals or water) under Minnesota Law. The facilitator's edition offers learning activities and information sheets to be used as transparencies. (Contains 52 references.) (CR)

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Module Four

Positive Behavior Strategies for Paraprofessionals

Facilitator's Edition

EC304989

Prepared by
[illegible] Community Integration (UAP)

UNIVERSITY OF MINNESOTA
The College of Education
and Human Development

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Module Four

Positive Behavior Strategies for Paraprofessionals

Facilitator's Edition

Prepared by
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Facilitator's Outline

About the Facilitator's Outline

This training module contains a facilitator's outline designed to assist instructors as they plan and prepare to teach the content of this course. The outline provides overviews of each chapter which include:

- Chapter goals to be accomplished by students.
- Materials necessary to teach each chapter including transparencies, supplemental readings, etc.
- Discussion questions to facilitate class lectures and discussions.
- Topics to be covered in each section.
- Activities to be completed by students both in and out of class.

These items are the same as those appearing in the outside margins of the facilitator's edition of this module. The discussion and activity notes, and answers to activity questions, appear in the facilitator's edition only – they do not appear in the students' edition. The text, however, is the same in both. In some cases, the discussions and activities may have been abbreviated in this outline, but provide the same basic information as it appears within the context of the chapter.

This can outline be used when planning lessons. It is a good idea to read through the outline before using it for instruction in order to know what to expect and learn how the material is tied together.

This module contains everything you will need to present the material: transparency masters and activity handouts are all included. The content of this module is based on a training series piloted in 1993 by Hutchinson Technical College in Hutchinson, Minnesota. Because of this, many references are specific to Minnesota's school and social service systems. We encourage instructors located in other states to replace the Minnesota specific information with information more relevant to their state.

Chapter 1
Behavior & the Environment

Chapter Goals

Upon completing this chapter, students will be able to:

- Demonstrate an ability to identify behaviors in an observable and measurable way.
- Recognize consequences and antecedents of behaviors and understand their affect on behavior.
- Define and recognize five learning principles related to learning new or strengthening existing behaviors.

Necessary Materials

- Transparencies 1.1–1.8
- Overhead projector

Section 1: What is Behavior?

Topics Covered

- Definition of behavior
- What goes on before and after behaviors occur?

Discussion 1

What is the definition of behavior? Why is it important to define behavior in measurable and observable terms?

Activity 1

Students will identify the behaviors in each of the three examples in this activity. Students will complete the activity individually and then discuss their answers with the class.
Approximate time: 10 minutes.

Discussion 2

What is the difference between an antecedent and a consequence? How do antecedents and consequences affect or influence behavior? Ask the class to share examples of consequences and antecedents. Discuss the A-B-C model.

Activity 2

Students will identify the antecedents and consequences in each of the three examples in this activity. Students will complete the activity individually and then discuss their answers with the class. Ask students how these antecedents and consequences affected or influenced the behavior.
Approximate time: 10 minutes.

Section 2: Using Consequences When Teaching New Behaviors

Topics Covered

- Positive reinforcement
- Negative reinforcement
- Punishment
- Extinction

Discussion 1

How can consequences be used to teach new or strengthen existing behaviors. How can consequences be added or removed for situations to facilitate learning behaviors? What is the difference between positive and negative reinforcement. Why do they always increase the likelihood the behavior will increase in the future?

Discussion 2

What is punishment? Is punishment always a negative approach to behavior? How can extinction be used to decrease behavior in a positive way?

Activity 1

For each example in this activity, students will provide answers to fill in the blanks. As students answer each question, record their responses on a transparency. After each example, wipe the transparency clean or have several blank transparencies ready. *Approximate time: 20 minutes.*

Section 3: Using Antecedents When Teaching New Behaviors

Topics Covered

- What antecedents tell us
- A definition of stimulus control
- Three rules of stimulus control

Discussion 1

How do antecedents signal us when and when not to exhibit a behavior. How may behaviors change when antecedents change in a situation? Discuss reasons why it's in someone's best interest to understand the antecedents in a situation.

Discussion 2

How can stimulus control be useful in teaching new behaviors? Discuss the three rules of stimulus control.

Activity 1

Students will read each scenario in this activity and determine whether or not stimulus control has been established. If it hasn't, students will specify what needs to change in order for stimulus control to be met. The activity may be done in small groups with students sharing their results with the rest of the class upon completion.
Approximate time: 15 minutes.

Chapter 2

Creating Positive Learning Experiences

Chapter Goals

Upon completing this chapter, students will be able to:

- Identify and define different types of reinforcers.
- Select and evaluate reinforcers based on the effectiveness, timing, size, and schedule of the reinforcement.
- Identify ways to create positive learning experiences.

Necessary Materials

- Transparencies 2.1–2.3
- Overhead projector

Section 1: Guidelines for Creating Positive Learning Experiences

Topics Covered

- Making environments more reinforcing
- Choosing tasks at which students can succeed
- Giving students control over activities
- Balancing preferred and non-preferred activities
- Reinforcing students often
- Providing positive rather than negative reinforcement

Discussion 1

What strategies can be used to create a positive learning environment for students? How do positive learning experiences affect motivation, morale, and behavior? Ask students to share examples of how they have successfully created positive experiences for students.

Activity 1

Observe how these six guidelines are or are not used in your own work environment (for students and employees). Students who aren't presently working can talk to someone at a local school, their child's day care, or a friend to find out how these guidelines are incorporated into their work setting. What effects do these guidelines have on behavior, morale, and motivation? Students can summarize their findings and bring them to share next week.
Approximate time: 15 minutes.

Section 2: Developing a Positive Reinforcement Plan

Topics Covered

- Improving communication through positive reinforcement
- Types of reinforcement
- Identifying possible reinforcers
- Determining the effectiveness of reinforcers
- Continued assessment of reinforcers
- Scheduling of reinforcers

Discussion 1

How does positive reinforcement facilitate and improve communication between instructors and learners? What types of reinforcements can be used when using positive reinforcement with students? How do you select appropriate reinforcements?

Discussion 2

How do you evaluate the effectiveness of reinforcers? Why is the timing and schedule of reinforcement important? What types of schedules work best with particular behaviors?

Activity 1

Through this role play activity, students will examine some effective and ineffective ways of delivering reinforcement. Use the instructions in the text.
Approximate time: 20 minutes.

Activity 2

Students will use the "Reinforcement Evaluation Form" to assess how reinforcement is used in the school or organization at which they work. Use the instructions in the text.
Approximate time: 20 minutes.

Chapter 3
An Overview to Challenging Behavior

Chapter Goals

Upon completing this chapter, students will be able to:

- Recognize physiological conditions and demonstrate an ability to minimize their affect on behavior.
- Recognize environmental conditions and demonstrate an ability to minimize their affect on behavior.
- Identify typical functions of challenging behavior.

Necessary Materials

- Transparencies 3.1–3.5
- Overhead projector

Section 1: The Cost Benefit Analysis of Changing Behavior

Topics Covered

- When is it appropriate to change a person's behavior?
- The cost benefit analysis

Discussion 1

When is it appropriate to try to change a person's behavior? How do you do a cost benefit analysis of a person's behavior? What are some good reasons to stop a person from behaving in a particular way?

Section 2: The Three Factor Theory

Topics Covered

- The three factor theory
- Physiological conditions
- Minimizing physiological conditions
- Environmental conditions
- Minimizing environmental conditions
- Functions of challenging behavior

Discussion 1

What are physiological and environmental factors? How do they influence the way a person behaves? How can physiological and environmental factors be minimized? What effect might this have on behavior?

Discussion 2

What are common functions challenging behaviors often serve for people?

Activity 1

Students will list the possible functions of the behaviors listed in the eight examples listed in this activity. Students may work individually or in pairs, sharing their answers with the class when finished. *Approximate time: 15 minutes.*

Chapter 4
Alternatives to Challenging Behavior

Chapter Goals

Upon completing this chapter, students will be able to:

- Demonstrate an understanding of how to pinpoint challenging behaviors.
- Identify strategies for teaching alternative behaviors.
- Demonstrate an understanding of managing reinforcements.

Necessary Materials

- Transparencies 4.1–4.6
- Overhead projector

Section 1: Putting it in Practice

Topics Covered

- Pinpointing behavior
- Determining the function of behavior
- Selecting alternative behavior
- Teaching the new behavior
- Managing reinforcements
- Differential reinforcement
- Guidelines for differential reinforcement

Discussion 1

Why are challenging behaviors so difficult to change? How do you pinpoint a behavior? Why is pinpointing an important first step in the process of teaching alternative behaviors?

Activity 1

Students will read this list of twenty words and choose whether or not the behaviors are both measurable and observable. If the answer is no, students will provide alternative behaviors under the "example" column. The first ten will be done as a practice exercise, with the second ten done as an individual activity.
Approximate time: 20 minutes.

Discussion 2

Why is it important to determine the function of a challenging behavior? What questions should you ask yourself when determining the function of behavior? What common characteristics should you look for when choosing alternative behaviors to teach?

Discussion 3

How can challenging behaviors be anticipated and minimized? Why should we teach alternative behaviors the students already knows and serves a function? What teaching strategies should be used when teaching alternative behaviors?

Chapter 5

Using Behavioral Interventions with Students

Chapter Goals

Upon completing this chapter, students will be able to:

- Demonstrate an understanding of the difference between exempted, prohibited, and regulated procedures.
- Demonstrate how to use regulated procedures.
- Demonstrate an understanding of the steps to take in an emergency situation.

Necessary Materials

- Transparencies
- Overhead projector

Section 1: What Behavioral Interventions Can and Cannot be Used with Students

Topics Covered

- Exempted, prohibited, and regulated procedures

- Assessment
- Parental consent
- Time-out
- Independent review committee

Discussion 1

What is a *deprivational* or *aversive procedure*? What is the difference between prohibited, regulated, and exempted procedures? How are regulated procedures used in the schools? What steps must be taken before a regulated procedure can be implemented?

Activity 1

Students will use the Assessment Summary Checklist to work in groups to address all six items on the list. Answers may be based on an imaginary student or loosely on individuals with whom students have worked. Remind students that if they decide to base their answers on real students they must keep all names confidential. Students will share their answers with the class upon completion of the activity.
Approximate time: 30 minutes.

Section 2: What To Do in an Emergency

Topics Covered

- Six step emergency procedure

Discussion 1

What are the steps involved in handling emergency situations? How can emergencies be averted?

Activity 1

Students will work in small groups to brainstorm ways that emergency situations can be prevented before they occur. When finished, groups will share their ideas with the class.
Approximate time: 15 minutes.

Discussion 2

Why are positive procedures always preferential to aversive ones?

Introduction

An Introduction to the Series

This series should be useful to paraprofessionals and paraeducators in education as well as direct service staff in community agencies in preparing for a career or in upgrading skills while already employed. Skills needed by individuals working under a variety of titles are often similar. Our focus is on those individuals working in education, but most of the information contained in this series is appropriate for others; please feel free to adapt it where needed.

The Need for Today's Paraprofessionals

The need for paraprofessionals to work with persons who have disabilities has been growing in recent years. Increasing numbers of persons with a range of disabilities are now living in small residential settings in our communities, attending regular classes in neighborhood schools, holding jobs in local businesses, and participating in community recreation and social activities. There is a great need for paraprofessionals to provide the services and supports these individual need for community living.

By employing paraprofessionals, services for persons with disabilities are able to expand and improve the quality of assistance they provide. Some of the benefits paraprofessionals offer service agencies and consumers are:

- Expanded learning opportunities for persons with disabilities.
- More individualized attention and instruction.
- Increased opportunities for individuals with disabilities to observe and learn appropriate behaviors.
- Increased planning time for educators, supervisors, and others.
- Improved staff morale.
- Better monitoring and evaluation of persons with disabilities.
- Greater consistency in services.
- Improved parent-school relationships.
- Greater involvement of persons with disabilities in education and other settings in the community at large.
- Transportation assistance for individuals with disabilities.
- Vocational skill development for individuals with disabilities.

The Role of Today's Paraprofessional

Paraprofessionals who work with individuals with disabilities have a variety of roles and definitions, depending on the environment in which they work. The Minnesota Department of Education (MN 3525.0200, Subp. 9b) definition states that a program assistant or pupil support assistant provides services to students only under the direct guidance and direction of a regular or special education teacher or related provider, and those services must be:

- To enhance the instruction provided by the teacher or related staff in academic instruction, physical or behavior management programs, transition, and other integrated activities.
- To supplement instructional activities or to provide extended practice in instances in which the support assistant has had training from a special education or related services staff, and continues to receive ongoing direction and support from a special education teacher.

From the National Resource Center for Paraprofessionals in Special Education and Related Services (City University of New York) comes this definition of a paraprofessional:

A paraprofessional is an employee:

- Whose position is either instructional in nature or who delivers other direct services to individuals and/or their parents.
- Who works under the supervision of a professional staff member who is responsible for the overall management of the program area including the design, implementation and evaluation of instructional programs and the individual's progress.

Paraprofessionals provide services in the following areas:

- Educational programs
- Physical therapy
- Occupational therapy
- Speech therapy
- Recreation programs
- Early intervention and preschool programs
- Social work/case management
- Parent training/child-find programs
- Vocational training programs and job coaching
- Community programs
- Transition

Paraprofessionals are typically different from professionals in the amount of education, certification required for the job, degree of responsibility, and extent of supervision required.

Because the support of paraprofessionals is so essential to the success of individuals with disabilities, this series is dedicated to improving and enhancing skills for paraprofessionals.

About the Series

Whether you have years of experience working with persons who have disabilities or are just beginning, there are probably many questions you have about the role of a paraprofessional. Some concerns and questions will be very specific to your work setting, while others will be more general. This series, *Strategies for Paraprofessionals Who Support Individuals with Disabilities,* will cover both.

This curriculum is primarily for paraprofessionals who are (or will be) working in educational settings (i.e., special and general education). It will, however, also be useful for those in direct service settings, such as vocational programs and residential settings.

The *Strategies for Paraprofessionals Who Support Individuals with Disabilities* curriculum has four general, or core, training modules and three specialized modules. The core modules, designed for all paraprofessionals, are:

- Module 1: The Paraprofessional: An Introduction
- Module 2: Providing Cross-Cultural Support Services to Individuals with Disabilities and Their Families
- Module 3: Promoting Self Advocacy and Facilitating Friendships and Socialization Skills for Individuals with Disabilities
- Module 4: Positive Behavior Strategies for Paraprofessionals

The three specialized modules that address competencies needed in specific types of service settings are:

- Module 5: Early Childhood: The Role of the Paraprofessional
- Module 6: Working with Individuals Who Are Medically Fragile or Have Physical Disabilities
- Module 7: Transition: The Role of the Paraprofessional

Each module is designed to stand alone, so you may select any one that best meets your needs. However, it's recommended that everyone begin with Module 1 because it provides a basic framework for work as a paraprofessional and for the material covered in all the other modules.

The training you are about to begin will not only address the current reality for paraprofessionals working with individuals with disabilities, but more importantly, the challenges for the future in your career as a paraprofessional. Paraprofessionals aren't expected to have a total understanding of all the concepts in these modules, but the paraprofessional who has a working knowledge of these core concepts will be most effective.

Guiding Principles

Each module emphasizes six basic guiding principles for paraprofessionals working with individuals with disabilities. Those principals include:

- The individual with a disability is the ultimate locus of control and is the most important member in the decision making process.

- The family is the other primary locus of control. Family involvement is essential in any decision making process.
- The team concept is essential in setting up a plan with an individual. This team includes the individual, the family, and all those working with the individual, including the paraprofessional. The paraprofessional is an essential link between what is and what can be for the individual. The best follow-through on any plan comes from teamwork.
- The community should be the basis for all training, as much as possible. This means that, whether offering real-life examples in the classroom or working in real life situations in the community, the focus must be on the most natural setting and support possible. This is essential so the individual can make connections between what is being learned on a daily basis and the real world. This will help the individual generalize the experience to similar situations in his or her life.
- Inclusion is the goal. This means that individuals with disabilities should be included in the mainstream of society – work, school, and recreation. Devotion to such a model will create the most positive results for the individuals and society as a whole. Inclusion suggests that we can and will all benefit by learning to work and live side by side with each other.
- The most effective paraprofessional will be the individual who has a good self-esteem and is able to be assertive. The assertive paraprofessional is able to ask for support and guidance from staff.

About You: The Adult Learner

We know that the adult learner learns differently than younger learners. This training reflects that understanding. In *Strategies for Paraprofessionals Who Support Individuals with Disabilities* we respect these principles about you, the adult learner:

- You are capable and eager to learn new information.
- You have voluntarily given your consent to become a part of this training, and are spending valuable time and money in order to participate.
- You have a rich range of experiences. Therefore you learn best when new information is built upon your past knowledge and experiences. That's why we will do exercises to help you synthesize the old and new information together.
- You come to a new learning situation as a self-reliant learner who has a good idea of how you want and expect to learn.
- Your willingness to learn is based on a combination of outside forces (family, kids, job, etc.) and inside forces (your anxiety, excitement, fears, etc.). All these factors are going to affect your feelings about learning.

- You come into new learning with your own agenda. You know what you want to get out of the training.
- You have set aside time and reorganized priorities to make this learning part of your already-busy life.
- You expect and genuinely appreciate a facilitator or instructor who is well-informed and well-prepared.
- You need to get actively involved in the learning exercises to get the most out of this curriculum.
- You want to apply what you learn to your own situations. That's when it has real meaning for you.
- You need a safe, comfortable environment in which to learn.
- You want to establish networks with others who are also interested in paraprofessional skills.

Because of these facts about you, trainers will:

- Review and ask questions about what you know.
- Respect and view you as a resource.
- Create a comfortable environment.
- Expect you to take responsibility for your own learning.
- Plan opportunities to practice new skills during class.
- Give examples of how to apply information.
- Use a variety of types of instruction.
- Provide ways to evaluate training.
- Use alternate methods to help you understand.
- Give information in a logical sequence.
- Give time for you to share your experiences.
- Give you the chance to get know other paraprofessionals.

After the Training

You will leave this training with more information about paraprofessionals than you had when you started. It's important to remember that no matter how much knowledge you have about your job, the individuals you work with are your greatest trainers. Each one is unique and has his or her own interests and needs. The greatest responsibility you have is to listen to those interests and needs, remember what you have learned, ask what is needed, and use that information in your working relationship and responsibilities.

Therefore, use this training as a basis and build your skills from this point, drawing upon each setting and individual. Whether client, student, teacher, supervisor, principal, director, or superintendent, you will learn from each. With each setting and situation your confidence, ability, and skills will continue to grow. Remember, this training is only as good as the degree to which you use what you learn; seek assistance so you can "do what you know."

1

Chapter One

Behavior and the Environment

1 **Introduction**
1 **Section 1 What is Behavior?**
4 **Section 2 Using Consequences When Teaching New Behaviors**
4 **Section 3 Using Antecedents When Teaching New Behaviors**
10 **Summary**
11 **Questions to Ponder**

Introduction

Why do people behave the way they do? What motivates people to change their behavior? Is it possible to teach positive behaviors to replace negative ones? Before any of these questions can be answered, you must be able to identify the specific behaviors you want to teach or change. In addition, you must also be aware of the environmental factors that accompany those behaviors – what's going on before, during, and after behaviors occur. This chapter will focus on the relationship between behaviors and the environmental factors that affect them.

Upon completing this chapter you should be able to:

- Demonstrate an ability to identify behaviors in an observable and measurable way.
- Recognize consequences and antecedents of behaviors and understand their effect on behaviors.
- Define and recognize five learning principles related to learning new or strengthening existing behaviors.

Section 1

What is Behavior?

Behavior is defined as any act which is both observable and measurable. *Observable* means that one can see and describe the behavior as it occurs. For example, you can see Stuart throw the ball or watch Robin as she practices the piano. *Measurable* means that one can count or measure the intensity (strength) and duration of the behavior. For example, you can measure how many times Stuart throws the ball or the distance he threw it or you can time how many minutes Robin practices the piano.

Describing behaviors in measurable and observable ways is important because it enables you to communicate with others about those behaviors. If your supervisor asks you to count the number of times Siân drops her pencil in an hour, you will be able to do so because "dropping a pencil" is an observable and measurable behavior. On the other hand, if you're asked to count the times Siân gets angry in an hour, you will have a more difficult time. How will you know when Siân is angry? What behaviors will indicate that she's angry? In this case it might be better to count the number of times Siân stomps her feet during the hour: stomping feet is a behavior that can both be measured and observed.

Discussion 1

What is the definition of behavior? Why is it important to define behavior in measurable and observable terms?

Show Transparency 1.1

Activity 1

Students will identify the behaviors in each of the three examples in this activity. Students will complete the activity individually and then discuss their answers with the class.

Activity: Identifying Behaviors

Look at three examples of situations and identify the behavior in each example.

- **Example 1:** Fred sees a cookie on a plate on the table. He picks the cookie up and eats it. The cookie tastes good and he picks up and eats another one.

  Behavior:

- **Example 2:** Wayne sees a girl in the hall. He asks her for a kiss. She slaps him. He doesn't ask for a kiss in the hall again.

  Behavior:

- **Example 3:** Maggie sees the flag up on the mailbox. She goes to check the mail. There is no mail. She doesn't check the box again until the flag is down.

  Behavior:

Discussion 2

What is the difference between an antecedent and a consequence? How do antecedents and consequences affect or influence behavior? Ask the class to share examples of consequences and antecedents. Discuss the A-B-C model.

What Goes on Before and After a Behavior Occurs

In assisting individuals to learn and use behaviors, an understanding of the relationship between behavior and the things that go on before and after the behavior is very important. Occurrences in an individual's environment provide signals to the individual about when to act. What happens before and after a given behavior determines whether the person will use the same behavior in the future. Considering these factors is important when you're either teaching a new behavior or helping an individual to learn when to use an existing behavior.

Antecedents

Show Transparency 1.2

Antecedents are conditions, events, or objects that precede behaviors and directly cause those behaviors to occur. For example, if someone gives you a cookie (an action), you're likely to eat it. In this instance, receiving the cookie is the antecedent which preceded the behavior of eating.

Consequences

Show Transparency 1.3

Although many things happen after a behavior, consequences result directly from the behavior. For example, if you press a selection button after putting money in a Coke machine, you get a Coke. In this instance, getting the drink is the consequence that resulted from your button-pressing behavior. Other things may happen – someone may talk to you, a fire alarm may ring, or there may be a total eclipse of the sun. None of these later occurrences are results of pressing the "Coke" button and aren't necessarily consequences (unless they happen repeatedly as a result of pushing the button).

The A-B-C Model

What's the difference between an antecedent and a consequence? The important points to consider are that the antecedent comes before the behavior and signals whether or not to act, and the consequence comes after the behavior and acts as a motivation to behave. Antecedents, behaviors, and consequences can be arranged in a logical A-B-C order:

Show Transparency 1.4

A → B → C

Antecedent Behavior Consequence

In the A-B-C model, the behavior is the action the person takes when he or she sees, hears, or feels the antecedents.

Activity: Identifying Consequences and Antecedents

Look at the three examples we examined in Activity 1. Identify the consequence and antecedent in each example. How do each affect or influence the behavior?

- **Example 1:** Fred sees a cookie on a plate on the table. He picks the cookie up and eats it. The cookie tastes good and he picks up and eats another one.

  Antecedent:

  Consequence:

- **Example 2:** Wayne sees a girl in the hall. He asks her for a kiss. She slaps him. He doesn't ask for a kiss in the hall again.

  Antecedent:

  Consequence:

- **Example 3:** Maggie sees the flag up on the mailbox. She goes to check the mail. There is no mail. She doesn't check the box again until the flag is down.

  Antecedent:

  Consequence:

Activity 2

Students will identify the antecedents and consequences in each of the three examples in this activity. Students will complete the activity individually and then discuss their answers with the class. Ask students how these antecedents and consequences affected or influenced the behavior.

Section 2

Using Consequences When Teaching New Behaviors

Discussion 1

How can consequences be used to teach new or strengthen existing behaviors. How can consequences be added or removed for situations to facilitate learning behaviors? What is the difference between positive and negative reinforcement. Why do they always increase the likelihood that the behavior will increase in the future?

People learn new behaviors – both positive and negative – as a result of the consequences of those behaviors. Most behaviors that are followed by pleasant consequences are repeated and thus learned, and the reverse is also true: behaviors that are followed by unpleasant consequences typically aren't repeated, and thus they aren't learned. For example, if you receive compliments for wearing a sweater you're more likely to wear it again.

Understanding how consequences influence behavior is critical in developing strategies to assist students and adults as they develop and strengthen existing positive behaviors. The following learning principles explain how consequences affect the way individuals learn new or strengthen existing behaviors. Further discussion of how to use these learning principles when working with students and adults will be contained in later chapters.

Positive Reinforcement

Show Transparency 1.5

Positive reinforcement occurs when a behavior's consequence *adds* something desirable to a situation that makes that behavior more likely to occur in the future. Consider these examples:

- You've taken your car to the neighborhood mechanic and have repairs completed for a fair price. The next time you need repairs, you go to the same mechanic. Getting a fair price was the positive reinforcement that caused you to choose that mechanic in the future.
- A student who receives an A+ after studying for a test decides to study hard for the next test. Getting an A+ was the positive reinforcement that influenced the student to study hard for the next test.

In both of these examples, the consequences – a fair price and a good grade – added something to the situation that increased the likelihood of a behavior happening again in the future.

Negative Reinforcement

Negative reinforcement occurs when a behavior's consequence *removes* something undesirable from a situation that makes that behavior more likely to reoccur in the future. Consider the following examples:

- You wake up on the couch in the middle of the night while the television blasts the static that follows a station's sign-off. You get up and turn the television off thus removing the static. You've learned that the behavior of turning off the television removes the blaring static.

- A buzzer goes off in your car until you buckle your seat belt. Buckling up removes the unpleasant buzzing, encouraging you to buckle up again in the future.

These are examples of negative reinforcement because behaviors increased when something was removed.

Positive and negative don't refer to whether something is good or bad, only to whether or not something is added (positive) or is removed (negative). Both positive and negative reinforcement always present the following characteristics:

- The reinforcement follows the behavior.
- The reinforcement results from the behavior occurring.
- The reinforcement causes the behavior to increase.

Punishment

Punishment occurs when something happens in a situation that decreases the likelihood that a behavior will occur again in the future. Punishment doesn't refer only to bad things that happen (i.e., spanking, negative comments) but is determined by its effect on behavior. If behavior decreased due to its consequences, it was punished. As with reinforcement, punishment can include the addition or the removal of something.

It's hard to think about punishers as being "positive": actions we might consider the most severe forms of punishment (i.e., spankings, derogatory comments) fall in this category. They are presented and the preceding behavior decreases (at least for a while). We'll call this category of consequences punishment. Consider the definition again: if a behavior decreases when something is added, it's been punished. For example, you give Oliver money for mowing your lawn, which he's previously done many times for free: he was offended by being paid and doesn't mow your lawn again. The money acted as a positive punisher.

Discussion 2

What is punishment? Is punishment always a negative approach to behavior? How can extinction be used to decrease behavior in a positive way?

Show Transparency 1.6

Extinction

Extinction describes a situation when a behavior decreases because it's no longer being reinforced. For example, students often call out in class to get the teacher's attention. When the teacher responds, he or she is positively reinforcing the student for calling out. If, on the other hand, the teacher ignores the student's calling out (not reinforcing the behavior) then the student is likely stop calling out in the future. The student's choice not to call out again is an example of extinction.

Activity 1

For each example in this activity, students will provide answers to fill in the blanks. As students answer each question, record their responses on a transparency. After each example, wipe the transparency clean or have several blank transparencies ready.

Activity: Behaviors & Consequences

For each of the scenarios, give a behavior, consequence, a behavior that changed, what was added or removed, the effects on behavior, and its consequences. Use the following example as a guide.

- **Example:** Fred is in the cafeteria and he flips down the coin return lever on a Coke machine. Two quarters fall out. He then pushes the coin returns on all the other machines.

Behavior	*Flips down the coin return*
Consequence	*Gets 50¢*
Behavior that changed	*Pushing coin returns*
Added or removed	*Added (positive)*
Effect on behavior	*Increased (reinforcement)*
Type of consequence	*Positive reinforcement*

- Joe cleans up his locker at the local high school. Marcus sees how neat it looks and tells Joe the locker looks great. Joe cleans his locker more often after that.

Behavior ______________________________

Consequence ______________________________

Behavior that changed ______________________________

Added or removed ______________________________

Effect on behavior ______________________________

Type of consequence ______________________________

- Joe cleans up his locker at the local high school. Marcus sees how neat it is and tells him he's a sissy for cleaning it up. Joe doesn't clean his locker again for months.

Behavior ______________________________

Consequence ______________________________

Behavior that changed ______________________________

Added or removed ______________________________

Effect on behavior ______________________________

Type of consequence ______________________________

- Joe's locker is really messy. Maria sees Joe's locker and tells him how bad it looks and smells. She teases him about it until he cleans it up. After he finishes cleaning, she leaves. He cleans his locker more frequently for a while.

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Behavior ______________________

Consequence ______________________

Behavior that changed ______________________

Added or removed ______________________

Effect on behavior ______________________

Type of consequence ______________________

- Joe cleans his locker. When he gets to class, Maria tells him he missed a field trip to the Science Museum because he was in the hall cleaning his locker. Joe doesn't clean his locker again for months.

Behavior ______________________

Consequence ______________________

Behavior that changed ______________________

Added or removed ______________________

Effect on behavior ______________________

Type of consequence ______________________

Section 3

Using Antecedents When Teaching New Behaviors

The antecedent can be a very important part of the environment. In most cases antecedents tell you whether the time and situation is right to perform a behavior. As we all know, timing is a crucial part of being successful. Antecedents are the signals that tell us when or when not to do something. Knowing the meaning of antecedents can help make a person more independent. Let's go back and look at the example of Fred and the cookies.

> Fred sees a cookie on a plate on the table. He picks the cookie up and eats it. The cookie tastes good and he picks up and eats another one.

What do you think would happen if the antecedent in this example was changed?

> Fred works at a restaurant which doesn't allow employees to eat on the job. He sees a cookie on a plate at a restaurant where he works.

If Fred considers the antecedent of *being at work,* he will most likely refrain from eating the cookie. If he disregards or doesn't

Discussion 1

How do antecedents signal us when and when not to exhibit a behavior. How may behaviors change when antecedents change in a situation? Discuss reasons why it's in someone's best interest to understand the antecedents in a situation.

understand the antecedent and eats a cookie anyway, he may have to pay the consequences of getting reprimanded or even fired for breaking work rules.

If you can read antecedents correctly, you have a much better chance of being successful. For Fred, knowing when and where eating is appropriate will allow him to be successful at work and to enjoy cookies when he's at home. Being successful builds self-confidence and self-worth. In other words, if an individual knows when a behavior will be reinforced and only behaves in those situations then he or she will be reinforced more often and punished less frequently. If a higher percentage of behaviors are reinforced, the person should be more motivated to respond to appropriate antecedents in the future. People will be more motivated by the natural consequences of social interactions and will learn more on a day-to-day basis through interactions with the environment.

In the last section we described positive and negative reinforcement, punishment, and extinction – principles that describe the relationship between behavior and consequences. The following section will discuss stimulus control – a learning principle that describes the relationship between an antecedent and behavior.

Discussion 2

How can stimulus control be useful in teaching new behaviors? Discuss the three rules of stimulus control.

Show Transparency 1.7

Show Transparency 1.8

Stimulus Control: Knowing When to Behave

Stimulus control occurs when a specific antecedent signals a specific behavior. For example, When Jack talks about his weekend fishing plans during a production meeting, he's demonstrating inappropriate stimulus control. Sometimes it's all right to talk about personal plans. Sometimes it's even a preferred type of conversation, but the secret is knowing when it's acceptable. This is the goal of teaching to improve stimulus control. Developing appropriate stimulus control is an important part of teaching.

Three rules must be followed to achieve stimulus control:

- The behavior occurs immediately upon presentation of the antecedent.
- The behavior doesn't occur in the absence of the stimulus.
- No other behavior occurs in the presence of the antecedent.

When teaching students about how antecedents relate to their behavior, the three rules of stimulus control will have to be taught separately. Consider the following examples.

- **Scenario 1:** Felicia is learning to clean up after meals. The current program calls for her to wipe off the table when requested.

  Antecedent: Request: "It's time to wipe off the table."
  Behavior: Felicia wipes off the table (with a sponge).

  Rule 1 is met when: Felicia starts to wipe off the table within a few seconds of the request.

Rule 2 is met when: Felicia doesn't wipe off the table at other times during the day.
Rule 3 is met when: Felicia doesn't go do something else when requested to wipe off the table.

- **Scenario 2:** Margaret is learning to use the city bus to get home from school. She rides Bus 43.

  Antecedent: Bus 43 stops at the bus stop.
  Behavior: Margaret gets on the bus

  Rule 1 is met when: Margaret gets on bus 43 as soon as it arrives at her stop.
  Rule 2 is met when: Margaret doesn't board other buses when they arrive at her stop.
  Rule 3 is met when: Margaret doesn't go do something else when bus 43 arrives.

Activity: Is it Stimulus Control Yet?

In the next group activity you first have three scenarios. Your task is to determine if stimulus control has been established. If it hasn't, you need to specify what changes in behavior would have to occur for stimulus control to be met.

- **Example:** Fred sets his alarm to ring at 6:45 so he can get up and get ready for work. About once each week he goes back to sleep and staff must wake him up or he'll be late for work.

  Antecedent: *Alarm rings*

  Behavior: *Fred gets up and gets ready for work*

  Is stimulus control developed? Yes ☐ No ☑

  If not, what behavioral changes must occur for the rules of stimulus control to be met?
  Fred must get up each morning and get ready to go to work.

- **Scenario 1:** Mary works at the local printers. Her job today is to inspect five different cards, reject the ones that have defective printing, and to insert the set in an envelope sent to prospective customers of the printer. She does a pretty good job inspecting the cards (only missing 4 in 100 defects), always puts five cards in the envelope, and always closes the envelope correctly.

  Antecedent: *Defect in cards*

  Behavior: *Reject defective cards*

  Is stimulus control developed? Yes ☐ No ☑

  If not, what behavioral changes must occur for the rules of stimulus control to be met?

Activity 1

Students will read each scenario in this activity and determine whether or not stimulus control has been established. If it hasn't, students will specify what needs to change in order for stimulus control to be met. The activity may be done in small groups with students sharing their results with the rest of the class upon completion.

Mary must reject all the defective cards.

- **Scenario 2:** Allen has learned to greet people by standing directly in front of them, establishing eye contact, extending his hand, and saying "Hi, it's good to see you" or "Hi, how are you today?" He had been greeting people with hugs. He never greets people with hugs anymore, and greets everyone he sees at his job, while shopping, and at home with this new greeting.

  Antecedent: *Sees people*

  Behavior: *Greets them with his greeting*

  Is stimulus control developed? Yes ☑ No ☐

  If not, what behavioral changes must occur for the rules of stimulus control to be met?

  In this case, the greeting may not be appropriate in each situation, and thus a different form of stimulus control might need to be taught. But a form of stimulus control has been established and this is probably preferable to the old behavior of hugging people in all of these situations.

- **Scenario 3:** Sally is learning to get her own work materials. When she starts to run out of materials she will often get up and go get more materials. At other times (when running out of materials) she will get up and ask the supervisor for more materials.

  Antecedent: *Running out of materials*

  Behavior: *Gets up and gets her own materials*

  Is stimulus control developed? Yes ☐ No ☑

  If not, what behavioral changes must occur for the rules of stimulus control to be met?

  Each time Sally runs out of work materials she will get up and get her own work materials.

Summary

Understanding the reasons why people choose to behave in certain ways is an invaluable tool for paraprofessionals and professionals working with individuals with disabilities. Being able to identify behaviors in an observable and measurable way will help communicate about those behaviors and to target them for reinforcement or change.

This chapter discussed five major learning principles that operate when people learn new behaviors. Positive and negative reinforcement, punishment, and extinction are principles that describe the relationship between behaviors and the consequences that follow them. Stimulus control describes the relationship between behaviors and the antecedents that precede them.

These learning principles can be applied when assisting individuals as they learn new or strengthen existing behaviors. The following chapters will explore ways to put these principles into practice.

Questions to Ponder

- In your own job, what types of consequences are set up to encourage you to follow work policies?
- What positive consequences can you list?
- How has positive reinforcement affected your behavior in the past?
- What types of antecedents or consequences have you been aware of when learning or teaching new behaviors in the past?

2

Chapter Two

Creating Positive Learning Experiences

13 **Section 1** **Guidelines for Creating Positive Learning Experiences**

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Introduction

A primary goal of all teaching situations should be to get the learner engaged, interested, and excited to participate. Creating an interesting environment and schedule of activities is the first step in this process.

In Chapter One, we discussed several learning principles that influence the way individuals learn new behaviors. Of these principles, positive reinforcement is the most important tool we have in developing and maintaining motivation and in teaching people to be more independent and productive. This chapter will examine some general guidelines to follow when creating a positive learning environment. We'll also look at the specific components that must be considered when planing a positive reinforcement plan for students with whom you work.

Upon completing this chapter, you should be able to:

- Identify and define different types of reinforcers.
- Select and evaluate reinforcers based on the effectiveness, timing, size and schedule of the reinforcement.
- Identify ways to create positive learning experiences

Section 1

Guidelines for Creating Positive Learning Experiences

Discussion 1

What strategies can be used to create a positive learning environment for students? How do positive learning experiences affect motivation, morale, and behavior? Ask students to share examples of how they have successfully created positive experiences for students.

Make Environments More Reinforcing

There are many different ways to make environments more reinforcing. People have experimented with everything from painting the walls pink (to give everything and everyone a warm glow) to using background music. The results show that making the environment a pleasant place to be makes people want to come there and stay. Clearly, an attractive environment is an important part of making an environment more appealing.

Choose Tasks at Which Individuals Can Succeed

It's important to choose tasks which individuals can accomplish and be successful. This doesn't suggest we should avoid giving people challenges, but addresses the fear of failure and frustration which often prevent people from trying new things. If we can ensure people can succeed and be reinforced through success, we increase the chance of engagement. Thus, when we set up activities, we want to challenge people to do some of the activity themselves but select steps from the task analysis the person can accomplish easily.

Activity 1

Observe how these six guidelines are or are not used in your own work environment (for students and employees). Students who aren't presently working can talk to someone at a local school, their child's day care, or a friend to find out how these guidelines are incorporated into their work setting. What effects do these guidelines have on behavior, morale, and motivation? Students can summarize their findings and bring them to share in class next week.

Give Individuals Control Over Activities

Giving people some control over the activity increases their motivation to participate in a task. For example, Brittany doesn't like to eat many foods and often doesn't want to eat supper with other people in the group home. What often happens is that she refuses the offered meal and will eat cereal later. When given a chance to choose food before the meal (with the exception of the cereal) she'll often choose a nutritious menu (although different from the group), fixes it herself, and enjoys eating with the group. When preparing for spring cleaning, Jack and Jill are very resistive to their assigned tasks. When given a chance to choose tasks, they're able to choose a fair share of the work and accomplish it without incident.

Balance Preferred and Non-Preferred Activities

The third idea is to look at the activities offered and try to maintain a positive balance between those that people really like to do and those that are less preferred but still necessary. In some ways this works because you always have something good to anticipate. In others, it works because the overall balance is positive, which makes this a good environment. This strategy can be effective for most people. For people with shorter attention spans, the activities should be changed more often.

Reinforce Individuals Often

Giving people a lot of positive reinforcement is a good way to get them motivated in the task at hand. Interestingly, it's not how much reinforcement is provided (you don't need to provide larger and larger reinforcers), but how often they're provided that makes a difference. Smaller reinforcers given more frequently are often more effective for getting people involved. Research has shown that providing positive feedback on a random basis helps increase engagement and learning. For example, the teacher who sincerely provides positive feedback frequently will experience decreases in challenging behavior and increases in engagement and pro-social behaviors.

One of the most effective ways to work with a group of people is to rotate attention around the group fairly rapidly. This keeps everybody involved and results in high rates of engagement and lower frequencies of challenging behavior. For example, Jake is a paraprofessional in a special education resource room. He has five students at different levels of independence in the tasks they do. Every five to ten minutes he'll walk around the area giving positive feedback to everyone who is working. For those who aren't working, he waits until later when he spots them working and then comments on their positive production.

Provide Positive Feedback

When working with students it's very important to provide many more positive than critical comments. Some research has suggested that, on average, people are motivated most when they receive four positive comments for every negative one they hear. A review of the value of comments finds that when a negative comment is given with a positive comment, that the overall effect is negative. So when Harold says to Jan, "I like the way you made the bed. You did a nice job of dusting. Your dresser drawers are closed, but I wish you'd pick the clothes up off of the floor," the overall impact is generally like receiving a negative comment. Even a comment like, "You're doing a good job but might try this differently," is generally taken negatively. A good way to handle this situation is to occasionally give short positive comments without suggestion about areas for improvement and then at other times give suggestions for improvement.

Section 2

Developing a Positive Reinforcement Plan

Improving Communication Through Positive Reinforcement

One of the most valuable outcomes of using positive reinforcement is that it improves and encourages communication between instructors and learners. The presentation of the reinforcer is a form of direct communication between the instructor and the student. For example, if a student is given a sticker for staying in his or her seat, the reinforcement (sticker) tells the learner that he or she was successful in meeting the instructor's expectations: "My behavior was correct; it was appropriate – and it worked!"

Reinforcement also gives the individual an opportunity to communicate what types of objects or events he or she prefers as reinforcement for good behavior. For example, a student may have to tell the instructor that he or she would prefer "more computer time" rather than a "sticker" as reinforcement for getting 100% correct on the test. Remember, something is only a reinforcement if it increases the likelihood of the behavior occurring in the future. Chocolate candies are reinforcement for most people, but not for those who are allergic to chocolate.

Lastly, reinforcement builds rapport between instructors and learners. Everyone wants to be around people who reinforce them. As a result, the learner will be motivated to work with the

Discussion 1

How does positive reinforcement facilitate and improve communication between instructors and learners? What types of reinforcements can be used when using positive reinforcement with students? How do you select appropriate reinforcements?

instructor delivering reinforcement which will naturally increase the number of opportunities for interaction and learning.

Selecting Appropriate Reinforcers

Show Transparency 2.1

We know that what works as a reinforcer for one person may not be a reinforcer for others. Susan may love playing baseball and work hard for the opportunity to play. Morgan may despise baseball and try to avoid it at all costs. Thus, selecting reinforcers for an individual is a very important programming decision. There are three important steps in the selection and continued use of a reinforcer. The first step is to identify appropriate reinforcers. The second step is to determine the effectiveness of the reinforcers. The third step is to continually monitor the effectiveness of the reinforcers selected.

Types of Reinforcers

The first thing to consider when selecting possible reinforcers is the type of reinforcer to use. There are four types of reinforcers that can be selected when using positive reinforcement.

Tangible Items

Tangible reinforcers are physical items. Food, jewelry, clothing, records, etc. are all tangible items that can be used as reinforcers. They can be seen and held. Joe may be given a book as a consequence for requesting a book. Shauntae may get a cookie after she helps make them.

Attention

Attention is often a powerful reinforcer. Verbal praise, high fives, or time to talk are all types of attention that can be reinforcers for some individuals. After Alonzo independently cleans his desk, you may tell him how responsible he is and what a good job he's done. After Lee has completed assigned homework, you might spend ten minutes discussing sports.

Success

Success at something can make you feel good and make you want to do the behavior again. Hitting a home run during a baseball game can make you feel great and will probably encourage you to play again. Even if no one congratulates you, you feel good about playing ball. On the other hand, if you strike out every time, you may not play baseball again for a while. One way to increase future behavior may be to be sure the individual is successful in doing at least some parts of the behavior during every session.

Access to an Activity

Access to an activity can serve as a reinforcer for some individuals. As a consequence for requesting help in turning on the stereo, Kate will be able to listen to music. A shopping trip, a lunch at a neighborhood restaurant, or the opportunity to go bowling can be powerful reinforcers. A vacation would be an activity reinforcer for many of us. Some insurance companies give vacations to employees as a reinforcer for selling a certain number of insurance policies.

Step 1: Identify Possible Reinforcers

The first step in the process of selecting a reinforcer is identifying a range of possible reinforcers. There are several ways to do this:

Show Transparency 2.2

Ask the Person What He or She Likes

If an individual has good communication skills, ask the person what he or she likes. Most people with a wide range of experiences can quickly identify food or tangible items they would like, activities they would enjoy, and kinds of attention they would enjoy. For example, in searching for a reinforcer for John's program to use the microwave oven, you might ask John what he would like to learn to cook. When asking, you can use open-ended questions (e.g., "What would you like to cook?") or more structured questions (e.g., "Would you like to make pizza or coffee?").

Observe the Person

A second way to identify potential reinforcers is to observe the person in situations where choices are offered. Things that the person chooses are probably things that the person enjoys or likes. If when given a choice at breakfast between orange juice and grape juice, Jaimael always reaches for orange juice, you might select orange juice as a reinforcer for signing juice. You can also get ideas for reinforcers by watching what kinds of activities the individual does during unstructured time and by observing responses to ongoing activities. If you see that Kelsey frequently spends her free time listening to the radio but rarely watches television, you can be pretty sure that listening to the radio is a more reinforcing activity than watching television.

Ask Someone Who Knows the Person Well

Another approach to identifying potential reinforcers is to ask someone who knows the person well if they have ideas. People who have known an individual for years have had more opportunities to observe the individual and to develop a broader range of possibilities than you could develop in a short period of time. Family members or friends often have great suggestions for tangible items or activities. They may often suggest things which are not present but that could be made available.

Have the Person Sample Reinforcers

A final way to select reinforcers is to have the person try potential reinforcers. There are many foods and other tangibles, activities, and social situations that individuals may never have tried. By providing opportunities to try these, new reinforcers may be identified. A person who has never gone to a movie wouldn't know if he or she likes movies or not. Some individuals are reluctant to try new things. You may need to encourage them to try an activity or item several times non-contingently. Observe the individual's response to the activity. After exposure to the activity or item on a few occasions, it may become a reinforcer.

Once you have identified several potential reinforcers you may want to determine which might be preferred by systematically pairing items. If you know that Ryland likes Coke, orange juice, and milk, you could find out which is the most reinforcing in the following way. Give Ryland the choice between Coke and orange juice six times, the choice between Coke and milk six times, and the choice between milk and orange juice six times. The drink Ryland chooses the most often is probably a more preferred reinforcer and will probably work best.

Step 2: Determine the Effectiveness of Reinforcers

The second step in selecting reinforcers is to determine the effectiveness of the reinforcers already identified. We can begin this step by considering some factors in the selection of reinforcers. These factors may influence how effective a potential reinforcer may be. Thus considering these factors before trying out the possible reinforcers may save some time.

Discussion 2

How do you evaluate the effectiveness of reinforcers? Why is the timing and schedule of reinforcement important? What types of schedules work best with particular behaviors?

Access to Reinforcers

This is an important factor. We might find, for example, that Mary Alice really likes chewing gum and thus it might be a good reinforcer. If her brother gives her several packs every day, gum may not work as a reinforcer. On the other hand, gum might be a powerful reinforcer if isn't readily accessible. A good use of gum as a reinforcer might be in a program to teach Mary Alice to make independent purchases.

Determine Motivation and Deprivation Levels for the Reinforcer

Motivation deals with how much of the potential reinforcer the person wants and how often he or she wants it. *Deprivation* addresses how often he or she gets it and in what amounts. It may be that something is a great reinforcer, but only once a day. A banana split may be a great reinforcer, but most of us can eat only so many in a day and still want more. If you're trying to teach a new behavior, you may need many reinforcers per session and thus selecting one big item isn't a good choice.

It's important to recall that individual rights limit us from removing normal access to items or activities for the purpose of increasing their reinforcing value; for example, limiting a person's access to drinking water in order to increase the effectiveness of juice as a reinforcer is a violation of that person's individual rights.

How Easy is the Reinforcer to Use?

Some reinforcers, like a field trip, can't be delivered immediately. Others, such as dinner during snack time, may be inappropriate. Any reinforcer you can't deliver probably isn't a good choice. For these reasons, social praise can be a very good reinforcer. You always have it with you, people usually don't get tired of it, it's easy to administer, and its use is generally appropriate.

Use a Variety of Reinforcements

Using a variety of reinforcers (tangible, attention, success, and activity) will help maintain attention and motivation to the task at hand. People get tired of the same old thing. It's often more effective to use a variety of new activities rather that using an old activity over and over again. In addition, changing reinforcers is often more effective than using the same one repeatedly. The novelty of seeing, hearing, or holding something new and different may also be reinforcing for some students.

Timing of Reinforcements

Immediacy of reinforcement is a critical element in developing a new behavior. To be most effective, a reinforcer should be delivered as soon as possible after the behavior. If the reinforcer is something you can deliver immediately, do it within seconds after the behavior occurs.

For example, Martin requests to listen to music. Since making requests is one of Martin's objectives, you turn on the music immediately after the request. If you don't, Martin might do something else and the reinforcer may follow this other behavior.

When you can't deliver the reinforcer immediately you can bridge the time by giving social praise immediately, e.g., saying "You did a great job. I'm going to take you to the science museum next week," and telling the person what will happen later. Sometimes points, tokens, or pictures of earned items or activities can be given immediately and exchanged later for the actual reinforcer. For example, Owen might earn a picture of a piece of pizza for attending class each day. He can then later exchange the picture for an actual piece of pizza.

The reinforcer should be delivered after the response. Reinforcers are not nearly as effective when used as a prompt or cue for behavior. If you tell your son that he will get a dollar for cleaning his room, you may provide an incentive for cleaning the room today. He probably won't clean his room next time just because it's dirty. He is probably going to wait until he can get a dollar. On the other hand, if after your son cleaned his room you gave him a dollar, he is more likely to clean his room independently in the future (while perhaps hoping for payment).

Scheduling of Reinforcement

Scheduling is another important aspect to consider when using positive reinforcement to teach or change behaviors. The *schedule* refers to how often the reinforcer is delivered. Recall that to be effective, reinforcers are delivered immediately after the behavior occurs. In some cases the reinforcer is delivered every time the behavior occurs, but most often it's delivered less frequently. When the individual is first learning a behavior, we often reinforce each correct behavior to help the individual learn quickly. Reinforcing every behavior is called *continuous reinforcement.* Some people mistakenly believe that if a behavior is taught using positive reinforcement you will always need to use reinforcement for each behavior. Reinforcement is very important at first but can often be gradually reduced once a behavior is learned. This is achieved by knowing how to use schedules of reinforcement.

Very few behaviors are naturally reinforced every time they occur. For example, in using the telephone, sometimes you're reinforced with conversation, but at other times the line is busy or no one answers. Just because no one answers, you don't stop using the phone. In fact, you probably use the phone more to complete your calls. On the other hand, every time you turn on the light switch you expect the light to go on. If it doesn't, you may assume it's broken and after a few quick tries stop turning on the switch (at least until it's repaired). As these examples show, behaviors that aren't reinforced every time (calling on the phone) tend to become more stable or permanent. Behaviors that have been consistently reinforced every time may quickly stop being performed when reinforcers are not given (turning on a light).

As we said earlier, you may need to reinforce a behavior every time it occurs while it's being learned. Reinforcing a behavior every time helps the individual learn the behavior more quickly. After the individual learns the behavior (becomes more proficient) reinforcement can be provided less often. For behaviors that are not reinforced every time in the natural environment it's wise to decrease the frequency of reinforcement to more natural rates of reinforcement before instruction ends.

Interval vs. Ratio Schedules

Show Transparency 2.3

There two general types of schedules of reinforcement. The first type, the *interval* schedule, is based on the amount of time since the last behavior. You might provide a reinforcer every five minutes or every hour. Most of us receive paychecks on an interval schedule. The second type, the *ratio* schedule, is based on the number of behaviors that occur. Reinforcement might be provided after every two, five, or hundred behaviors. Factory workers who are paid on a piece rate basis are paid on a ratio schedule. If a child needs to complete three math problems before getting a tangible reinforcer, this is also a ratio schedule.

Let's consider some examples. Which are interval and which are ratio schedules?

	Interval	Ratio
• Ten dishes washed thoroughly.	☐	☑
• Every half hour of piano practice.	☑	☐
• Every five minutes of on-task behavior.	☑	☐
• Five days of having a clean room.	☐	☑
• Three greetings returned	☐	☑
• One hour with no self-injury.	☑	☐

Logically, some behaviors are better suited to interval or ratio schedules of reinforcement because time or count is most important. Later in this module we'll talk about reinforcing an individual for not performing a behavior (for example not hitting for a day or refraining from self-injurious behavior for ten minutes). Obviously in these cases, you must use an interval schedule.

Fixed vs. Variable Schedules

As a second dimension, interval and ratio schedules can both be either *fixed* (always delivering reinforcement after the same amount of time or the same number of behaviors) or *variable* (delivering reinforcement after a non-uniform passage of time or number of behaviors).

Most naturally occurring behaviors are maintained on variable schedules. In our earlier example of the telephone, we saw the reinforcement was variable: you're not sure when you will be reinforced with a conversation. Sometimes it may take ten calls before you get an answer while at others you may get an answer for ten consecutive calls.

In the following examples, which are fixed and which are variable schedules of reinforcement?

	Fixed	Variable
• Ten dishes washed thoroughly.	☑	☐
• After every ten widgets are assembled:	☑	☐
• After working for five, then ten, then six, then eight minutes:	☐	☑
• After every half hour with no aggression:	☑	☐
• After three books are read, then after one, and then after two books are read:	☐	☑

Considerations in Selecting a Schedule for Reinforcement

When selecting a schedule for reinforcement it's important to consider how well the person does the behavior. It's also important to think about the type of behavior and the natural schedule of reinforcement.

With the exception of behaviors that are reinforced every time (for example, turning on switches or using a vending machine) reinforcement generally doesn't occur exactly after a certain number of behaviors every time (a fixed schedule), it occurs approximately after a certain number of behaviors (a variable schedule). Variable schedules lead to more stable rates of performance of behaviors and will be more likely to continue longer in the absence of reinforcement.

Step 3: Continued Assessment of Reinforcers

The third step in selecting a reinforcer isn't so much a step as an ongoing process. Once you've considered the above factors, try the reinforcer. Although you've made some good guesses about what might be reinforcing, you might be wrong. Perhaps Ryland doesn't like Coke, or orange juice, or milk. He just chose Coke because he dislikes it least. He might not be at all motivated to work for Coke. When we first use the reinforcer we need to make sure it's working – this is called *initial validation.*

Reinforcers may not remain effective forever. As a reinforcer is being used, continual assessment must take place to assure that it remains effective. Sometimes a reinforcer will wear out. Although Chelsey might really like to play checkers and may be motivated to socialize during a game, she may tire of the game if she plays for several days in a row.

Let's face it – we all get bored. No one item or activity is probably going to continue to be reinforcing indefinitely. If you notice that performance is decreasing, it may be time to use a different item or activity as a reinforcer. If a reinforcer isn't used for a while, it may become effective again. You may run out of ideas for social activities for Chelsey. After a couple of weeks, Chelsey might really want to play checkers again: give it another try.

Activity: Evaluating the Effectiveness of Reinforcements

Activity 1

Through this role play activity, students will examine some effective and ineffective ways of delivering reinforcement. Use the instructions in the text.

Use this role play activity to examine some effective and ineffective ways of delivering reinforcement. The class will be divided into groups of two to four and each group will be assigned one of the following scripts to role play. Take ten minutes to practice your role plays before presenting it to the class. A group's member should read the "behaviors to be reinforced" to the class before the group presents their role play. Follow the role plays with a class discussion.

- **Script 1:** Larry is a paraprofessional in a school-to-work program in a local motel. Today, Becky is dusting, straightening, and cleaning rooms. Larry is walking around the room and periodically telling Becky that she's doing a good job. This generally occurs just after Becky has stopped working and is primping (combing her hair, tying her shoes, etc.). Becky begins to go back to work briefly after each encounter and then looks around for Larry to come talk to her. You're demonstrating how badly timed reinforcement can be counterproductive to your training efforts.
- Behaviors to be reinforced: *dusting, straightening, and cleaning rooms*

- **Script 2:** Julie is sitting in a chair in her third grade classroom. Suzie is a staff member. Suzie comes up and tells her, "We'll have some brownies when you finish your work." She says this several different ways and then Julie says "I don't want brownies." You're trying to show that prompting with a potential reinforcer doesn't work and that the attention given may cause a problem which can result in a delay or refusal to do the task.
- Behavior to be reinforced: *doing school work*

- **Script 3:** Jefferson is learning to button his clothing independently. Dewayne frequently gives Jefferson social praise but sometimes he gives a drink of Coke. When Jefferson gets the Coke, he stops buttoning and sits down and drinks it. Jefferson also looks at the Coke more than the buttoning task. You're trying to show the use of an inappropriate reinforcer.
- Behavior to be reinforced: *buttoning clothing*

- **Script 4:** Paul is talking to Gwen but generally isn't looking at her. Gwen is trying to encourage Paul to establish eye contact. Each time Paul looks at Gwen's eyes, Gwen offers a piece of candy. Paul takes the candy but doesn't eat it. Paul doesn't increase the amount of eye contact. You're trying to show that candy isn't a reinforcer for Paul.
- Behavior to be reinforced: *eye contact*

Activity: Evaluating Reinforcements

Using the "Reinforcement Evaluation Form" below, assess how reinforcement is used in the school or organization in which you work. If you aren't presently working, contact a local school or ask a classmate if you can observe his or her classroom. Bring your completed form to share with the class next week.

Activity 2

Students will use the "Reinforcement Evaluation Form" to assess how reinforcement is used in the school or organization at which they work. Use the instructions in the text.

BEST COPY AVAILABLE

Person Observed ______________________________

Date ______________________________

Observer ______________________________

- Does the instructor use positive reinforcement?

- If so, what was the "reinforcer"?

- Does it appear to be an effective reinforcer?

- Comment on the size of the reinforcer.

- Comment on the timing of the reinforcer.

- Comment on the schedule of reinforcement.

Section 3

Common Questions About Reinforcement Techniques

You may question the use of reinforcement techniques. Here are answers to some frequent questions which are adapted from Sulzer-Azaroff and Mayer (1986).

Q *How do you balance the use of natural reinforcers with artificial ones?*

A Natural reinforcers are preferred since they will continue to exist after you've completed the program. If you don't think the behavior being taught has any natural reinforcers, you should question whether or not the training has any value. (Although natural reinforcement isn't reviewed here, students may ask this question.) The effectiveness of natural reinforcers can often be increased by controlling the amount of a reinforcer, by carefully controlling when the reinforcer is delivered or my making the natural reinforcer more noticeable.

Sometimes when a task is being learned, it's so hard to accomplish that the effort outweighs the benefit of any naturally occurring reinforcers. During this training time, artificial reinforcers and/or much larger reinforcers may be necessary supplements to natural reinforcers.

Q *Why should people be reinforced for something they should do anyway?*

A We're faced with existing behaviors (or a lack of them) rather than what behaviors should exist. If behaviors occur, we can assume they're being naturally reinforced. If not, we may need to strengthen behaviors and plan for natural reinforcement.

Q *What do you do when other people see an individual receiving reinforcers for something they do without extra reinforcement?*

A All people should have opportunities for attention, desired items, activities of their choosing, and opportunities for success. Although each learner may receive reinforcers for different behaviors they should all have similar opportunities. It may help others understand if you praise them for the success they have achieved in performing some behaviors without extra reinforcement and point out that they have similar opportunities for reinforcement for other behaviors. Differences are minimized by using naturally occurring reinforcers.

Summary

Positive reinforcers are extremely important in creating a positive learning environment for students. To use reinforcers effectively you need to carefully select and monitor the effectiveness of reinforcers while paying close attention to the timing and size of reinforcers. The type of schedule you choose depends on several things, including whether you think an interval or a fixed or variable ratio schedule will work best. Variable schedules are often desirable since they produce more stable rates of behavior.

Questions to Ponder

- What types of things are reinforcing to you personally?
- What steps have you taken to learn a new skill in the past?
- In your experience with young people, what kinds of things have been effective positive reinforcers (i.e., what types of things encourage them to increase their appropriate behavior in the future)? Have you noticed differences in the types of things that have been effective reinforcers for adults?
- Is verbal praise always a positive reinforcer? Why or why not?

3

Chapter Three

An Overview of Challenging Behavior

27 **Introduction**

27 **Section 1 The Cost-Benefit Analysis of Changing Behavior**

28 **Section 2 The Three Factor Theory**

37 **Summary**

37 **Questions to Ponder**

Introduction

Individuals who throw temper tantrums, hurt themselves or others, or refuse to cooperate are often described as exhibiting *challenging behaviors*. Sometimes referred to as *maladaptive, aberrant,* or *problem* behavior, challenging behavior often includes such things as aggressive, self-injurious, destructive, and bizarre actions. Challenging behaviors often cause problems for the individual as well as people with whom he or she interacts. When confronted with a challenging behavior, it's natural to want to change the person's behavior. But before we decide to change or stop a challenging behavior, we must examine the causes for the behavior occurring in the first place. This chapter will explore the reasons that people behave in ways we consider challenging. We'll also offer some suggestions on how to create an environment that will minimize challenging behaviors while also developing positive behaviors.

Upon completing this chapter, you should be able to:

- Recognize physiological conditions and demonstrate an ability to minimize their affect on behavior.
- Recognize environmental conditions and demonstrate an ability to minimize their affect on behavior.
- Identify typical functions of challenging behavior.

Section 1

The Cost-Benefit Analysis of Changing Behavior

When we decide to stop someone from doing something, we are restricting that person's ability to choose their own behavior. This shouldn't be done without a lot of thought. Decisions to change a person's challenging behavior need to be made by the team rather than by one individual. The team should know which procedures must be reviewed by the human rights committee or need informed consent. Remember, we don't have a right to make people behave like us just because we have the ability to do so. We need a good reason to change another's behavior. Some good reasons for changing challenging behavior include:

- They're dangerous to others.
- They're dangerous to themselves.
- They destroy property.
- They're a barrier to independence.
- They're a barrier to integration or inclusion.

Discussion 1

When is it appropriate to try to change a person's behavior? How do you do a cost benefit analysis of a person's behavior? What are some good reasons to stop a person from behaving in a particular way?

Before considering restricting or limiting behavior, we should ask ourselves if the benefits of changing a behavior outweigh the costs. This is called a *cost-benefit analysis.* Costs are determined by the effort it takes to change the behavior, and – more importantly – the effects of the change on the person being changed. For example, consider Mary who engages in socially "rude" behaviors during conversations. These behaviors upset people and make it harder for her to have friends. If your approach is to talk to Mary and explain what people think of her behavior and how changing it may help her make and maintain more friends, the costs are low: Mary has listened to some criticism about herself and you've spent a little time with her. The benefits might be visible in terms of better interactions with others and more friends. This would be a good cost-benefit. On the other hand, if the method used to change the behavior is to belittle her in front of other people, the costs will be apparent in terms of decreased self-worth, looking bad in front of others, and damage to your relationship with Mary. The benefits might not be worth the costs.

Before we decide to change a behavior we must determine if there is a good reason to change it and then determine if the benefit of the change is worth the cost.

Section 2

The Three Factor Theory

Discussion 1

What are physiological and environmental factors? How do they influence the way a person behaves? How can physiological and environmental factors be minimized? What effect might this have on behavior?

Show Transparency 3.1

When working with individuals who exhibit challenging behaviors, it's important to try to find out why the person behaves in a way that we find challenging and what conditions may contribute to the individual's behavior. For example, Jane may have numerous reasons for screaming when her toys are taken away. Maybe she's afraid she won't get the toys back; maybe she knows she'll be removed from the room just before reading starts, thus avoiding an activity she doesn't like.

When exploring the reasons behind challenging behavior, it's important to consider the following three factors:

- The physiological conditions that may cause or affect the behavior (e.g., sickness, medication, hunger).
- The environmental conditions that may cause or affect the behavior (e.g., loud noises, extreme heat or cold, time of day).
- The function the behavior serves (e.g., what the person gets by acting a certain way, the benefit of the behavior).

It's important to consider physiological, environmental, and functional conditions when working with individuals with challenging behaviors. Let's explore each of these in greater detail.

Physiological Conditions

A *physiological condition* is one that involves the one's body or physical state. We might be hungry, thirsty, or tired. We might have a headache, a cold, or arthritis pains; we might have a bad reaction to food or drugs. Each of these may change the way we perceive – and thus react to – the environment. For example, we might enjoy small talk most of the time but hate it when our stomach hurts. We must be aware of physiological conditions as we work to find the causes of challenging behavior.

There are numerous types of physiological conditions that can contribute a person's behavior:

- Hunger or thirst
- Sleeplessness or fatigue
- Physical pains – headaches, arthritis, menstrual cramps
- Stomach problems – gastritis, constipation
- Sinus headaches, hay fever, and allergies
- Mood swings and seizures
- Reactions to food and medication

Physiological conditions may be chronic (long-term) or acute (short-term). Headaches, sinus infections and colds are examples of acute physiological conditions that may affect a person's behavior. When treated for these conditions, their challenging behaviors usually disappear or occur less frequently.

Chronic physiological conditions include such things as allergies, physical illness, and reactions to medications or food. For example, individuals experiencing mental illness often engage in challenging behaviors in response to internal stimuli. They may hear voices, see and feel things that aren't there, or have rapid mood swings. Even seizures can cause changes in mood.

Medications can also cause dramatic changes in behavior. Occasionally, behavioral side effects can result from medications prescribed to control blood pressure, hyperactivity, gastric distress, and other medical needs.

In addition, foods may also have an affect on behavior. We all know someone who gets over-active after drinking a strong cup of coffee – becoming hyperactive, very talkative, and over-sensitive. Other people react to sugar, food dyes, or artificial sweeteners. All of these physiological reactions may have impact on behavior.

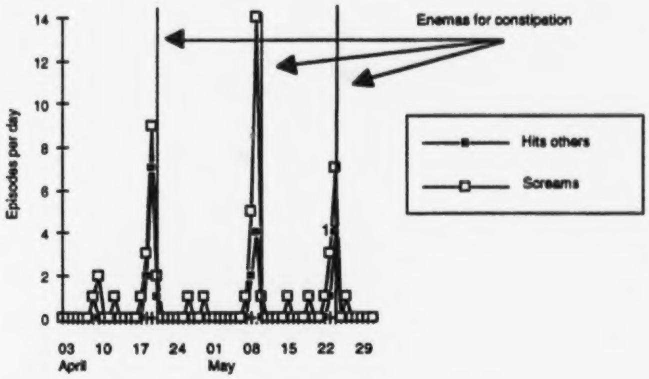
Minimizing Physiological Conditions

Step One: Recognizing Physiological Conditions

Show Transparency 3.2

Once we decide that a physiological condition may be contributing to a challenging behavior, we can use some common sense and the prescribed medical treatments as part of the plan to change the problem behavior. First, we'll want identify the person's physical problems and conditions. Second, we'll want to determine if the problems or conditions regularly come before or at the same time as the problem behavior. For example, we know Sue has a problem with constipation that occurs several times each month. If the times she is constipated coincides with times of increased problem behavior, constipation is probably a physiological condition for increased challenging behavior. Examine the graph below which depicts Sue's behavior during the month.

Show Transparency 3.3



In the graph, we see three periods in which Sue had many more episodes of hitting others and screaming than on other days. Then we compared these days to the times she was known to be constipated. Note how much the challenging behavior increases right before she received enemas. Let's review the steps in the detective process we covered last week for recognizing physiological setting events.

Step Two: Anticipate and Prevent the Physiological Condition from Occurring

The second step to minimizing physiological conditions and events is to anticipate and prevent them from occurring. For example, if we know Sue has challenging behaviors when she's constipated, part of her behavior plan should be to try to prevent her from becoming constipated. The dietitian, nurse, or doctor may add fiber to her diet, provide preventative medication, or suggest exercise. We may need to encourage her to drink plenty of fluids. Each of these is a preventative step. In the same way, if we know Wendy has a tougher time each spring because of allergies, she might plan more indoor activities during this time and take a medication to prevent the reaction.

Challenging behaviors can also be used to alert a professional or family member to the presence of a physiological condition. For example, Joel is a fifteen year old young man who doesn't communicate his physical problems through verbalization or signs. He's prone to chronic upper-respiratory infections. Several days before the physical signs of the respiratory infection are apparent, he often begins to severely bite his hand. Using this as an indication of a potential problem, staff have sought medical assistance earlier and Joel has avoided pneumonia for the past three years. Prior to this discovery he had four episodes of pneumonia in two years. Being aware of the relationship between a behaviors and physiological conditions can help people with communication difficulties get needed medial treatment.

The same may be true for people with cyclical mood swings. For many people, these mood swings are caused by physiological changes which may happen without the person recognizing that he or she is reacting differently. In these cases, the changes may be obvious to others before they are noticed by the person.

Once we know an individual has a physiological problem, we can notify any appropriate medical professionals and treat it. When Sue gets constipated, she takes a laxative. When Edith gets menstrual cramps, she takes medication. When Wendy has active allergies, she goes to the doctor and gets allergy medication. When Frank gets a mosquito bite (which is a setting event for self-injurious scratching), he puts lotion on it to stop the itching.

Case Study

Let's look at the example of Elmer, a ten year old boy with mental retardation, included in a regular fifth grade classroom. He has a paraprofessional with him one-to-one at all times. Several times per week, Elmer will hit his peers while they're engaging in group activities in the afternoon. Elmer is usually engaged in different activities from his Individual Educational Plan (IEP). He also engages in self-injurious behaviors: he will bite his hand and hit himself in the head. The hand-biting is severe enough to have caused tissue damage. To determine if there are physiological setting events for these behaviors we would first need to determine if he has physical problems or conditions that might be setting events.

First we can review the different types of physical conditions and see if any apply to Elmer. Talking to family members and others close to Elmer can help identify these conditions.

In reviewing these for Elmer, we discover that he doesn't seem to have problems with hunger, thirst, or metabolism. He does have sleepless nights, so this might be a problem. He doesn't have headaches, toothaches, or earaches that we know about. He does have arthritis pains when it's cold or damp. He gets gastritis when he eats fatty foods or tomatoes. He doesn't have allergies or hay fever. He does have mood swings: about once a month he has a period of two to three days when he is more active, talks about strange things, and seems to be less aware of the current activities. This is evident through a change in his affect. As we said before, he has reactions to tomatoes and fatty foods. So we have identified some physical conditions that may be setting events. If after your review of a person, you identify other physical conditions or problems they should also be listed.

The next step in determining if these physical problems or conditions are setting events for the challenging behaviors is to compare the times of the physiological events with the times of the challenging behaviors. For example, we know that Elmer had trouble sleeping on six different nights (in the past few months). Did he have increased challenging behaviors on the following days? If so, this would be a setting event.

In fact, Elmer didn't have any behavior problems on the days following sleepless nights. This suggests that sleep problems aren't a setting event for him. In general, he'll just take a nap when he gets tired. When we examine those days his arthritis bothers him, we again find he doesn't engage in many challenging behaviors on these days. On the other hand, on the days we know he had a stomach ache, he seems to have been much more likely to hit others and engage in self injury. This suggests that the gastritis may be a setting event for the challenging behaviors. In addition, the days he was having his mood cycles were days of increased episodes of self injury and other bizarre behaviors. This suggests that the mood swings constitute a second potential physiological setting event for Elmer.

Environmental Conditions

In the previous section we examined the effects of different physiological conditions on challenging behavior. Here we'll examine how environmental conditions and factors can affect behavior. Environmental conditions include factors associated with the location, an activity, people, schedules, and/or other events.

Location

If we examine where challenging behaviors occur, we often find there are some locations in which the individual is most likely to do the behavior. For example, Fred has few problems with challenging behavior except when he's in the resource room. At first the reason appeared to be the academic work, but several times in the past month there have been social events in the resource room and he still had problems. Thus it appears that something about the resource room is contributing to Fred's behavior. Ask yourself, What's going on in the resource room? Do the fluorescent lights irritate Fred? Is he allergic to the new carpet that was just installed? Being aware of the location of the problem is a good starting point in determining the cause of challenging behaviors.

People and Activities

Let's go back and think about Elmer again. Elmer often hit people in the classroom but almost never on the playground, in the lunchroom, or at assembly. What's going on in the classroom that causes Elmer to hit his classmates? What activities take place when he exhibits his hitting behavior? Does he always hit the same student? Examining the activities and people surrounding Elmer might help to identify an environmental factor that is contributing to his hitting behavior.

Schedule, Time of Day, and Season

Sometimes a change in routine or schedule can cause a person to exhibit a challenging behavior. For example, Susan started shouting and cursing when told she would be having her hearing checked instead of going outside for recess.

Time of day also affects the behavior of certain individuals. For Elmer, all the hitting behaviors occurred after 1:00 but before 3:00 in the afternoon. What's going on for Elmer during this time? Is he tired and therefore irritable? Does he eat a lot of candy at lunch which causes him to be more active? Considering when the behavior occurs can be very useful in determining its cause.

The season may also affect behavior. The excitement of springtime may cause students to be anxious in the classroom; the reduced daylight in winter may make students more moody. The season may also affect the temperature in the classroom. Extreme heat or cold make concentrating on work very difficult. Certain physical conditions such as the flu or allergies are related to what's going on in the environment outside the classroom.

Minimizing Environmental Conditions

Show Transparency 3.4

The first step in minimizing environmental conditions is to determine if these conditions influence behavior. Once these determinations have been made, the second step is to anticipate the existence of environmental conditions and prepare the individual to deal with them as appropriate – or prevent them altogether.

Step One: Recognizing Environmental Conditions

Earlier exercises asked you to identify environmental conditions that contribute to the occurrence of challenging behavior. The first step in this process was to identify the problem behavior. This is important because it allows us to specify the conditions that occur before and during the behavior.

If we know what conditions or events are likely to set someone off, we can anticipate these situations and take steps to prevent them or minimize their effect. For example, loud noises irritate Fred and cause him to engage in self-injurious behaviors. If he's considering going to a concert or wrestling match, we might suggest that he wear earplugs or rethink his decision to go. Bridget gets upset when she is exposed to yelling and screaming by her classmates. When Joyce begins yelling near Bridget, we might ask Joyce to leave the area.

In addition, we can use this information to think ahead about future activities and anticipate conditions that might influence behavior negatively. We should also be alert for unplanned events and be prepared to respond to them if necessary. Knowing what events and conditions serve as precursors to challenging behavior allows us to be better prepared to deal with those behaviors. This also helps us to take preventative measures to minimize the effects of potential environmental conditions.

Step Two: Anticipating and Preventing Environmental Conditions

One preventative measure we might take would be to prepare the individual for upcoming events. For example, changes in schedules and scheduled activities might trouble Bryce and cause him to scream. When faced with a change to his normal schedule, Bryce can become very stubborn and shout that the change is wrong. Staff have found that telling Bryce about the change in advance and having him tell someone else eases the problem. This is one example of preparing the individual for an upcoming environmental condition.

Another example might be discussing the potential problem with the individual and suggesting that he or she avoid the environmental condition. Martha dates Fred occasionally and would like to be his steady girlfriend. He prefers, however, to date several girls. Martha becomes upset and cries when she sees Fred with other girls at the high school. She sometimes becomes physically aggressive when she sees him with Sally or Freida. Martha has been invited to a party that Fred, Sally, and Freida will attend. You might suggest to Martha that she avoid the problem by going to a movie or that she should leave if she starts to get upset.

One of the best ways to detect oncoming challenging behavior is to recognize the antecedent behaviors that indicate the onset of a challenging behavior. For example, Martha generally gets depressed and mumbles about "no good, two-timing boyfriends" and "those girls" before she gets angry enough to begin striking out. If you can talk to her and redirect her to another topic or location while she is still mumbling, she generally doesn't get physically aggressive. Albert doesn't tolerate loud and confusing environments very well and will often beat his head when confronted with this type of situation. He often starts moaning before be hits his head. The moaning is an antecedent behavior.

It's important to be alert and intervene quickly when you notice an environmental condition starting to have its effect. If you act when Martha first starts mumbling or Albert first starts moaning, it's easier for them to redirect their attention.

Functions of Challenging Behavior

After physiological and environmental conditions have been ruled out as explanations for challenging behavior, we must try to discover what "function" that behavior is serving for the individual. What does the person achieve or benefit from performing the behavior? How do others respond to the individual when he or she behaves in a particular way?

The following examples illustrate some common functions that challenging behavior serves:

- **Obtaining Something:** A child in the grocery store throws a tantrum to get a preferred food item. When a parent gives the child the item to "quiet her" the behavior has proven functional. The child has learned an effective way to get what she wants.
- **Keeping an Object:** When you take the pacifier away from a child he may scream and pound his feet on the floor. If you give the pacifier back, the screaming becomes a functional behavior.
- **Gaining Access to an Activity:** When Charles isn't allowed to keep his teddy bear with him during class at the elementary school, he begs and threatens his teacher and paraprofessional. If they allow him to keep the bear with him, the begging and threatening are functional behaviors. He gets to keep his toy because of his challenging behavior.
- **Self-Stimulation:** Jay may turn around in circles because he likes to feel dizzy. Rhoda may flip her fingers in front of her eyes because she likes the way it looks and feels. Susan pokes the side of her head because she has an earache.
- **Avoiding a Task:** Carol throws school materials when faced with a nonpreferred task. The task is removed so she won't throw the test materials. Next time she doesn't like a task she may throw things so she doesn't have to do the task.

Discussion 2

What are common functions challenging behaviors often serve for people?

Typical Functions of Problem Behaviors

Show Transparency 3.5

Antecedent Behavior	Possible Functions
Nonpreferred task	*Avoid task*
Frustrating task	*Assistance with task*
Demanding instruction	*Escape instructions*
Not enough attention	*Get attention*
Someone else gets attention	*Get attention*
Stops paying attention	*Get attention*
Preferred person busy	*Get attention*
Wants something	*Get something*
Changes in routine	*Object to changes*

Activity 1

Students will list the possible functions of the behaviors listed in the eight examples listed in this activity. Students may work individually or in pairs, sharing their answers with the class when finished.

Activity: Functions of Behaviors

Let's look at some examples of antecedents and behaviors and you list the possible functions of the behaviors. The functions are the reasons the person does the behavior. What are the probable functions of these individuals' behaviors in the following cases?

- John doesn't like assembly requiring fine motor skills. When asked to do tasks requiring fine motor skills he often screams.

- Gilbert enjoys doing assembly tasks requiring fine motor skills and enjoys almost any job once he's learned to do it well. He often bites his hand when a new job begins.

- Mary Alice starts screaming because she hears voices of people who aren't there.

- Janice bites her hand because she has a subclinical seizure.

- Frank doesn't like to start work but does well once he's started. When asked in a stern and demanding tone to start work, he'll often throw something and stalk off.

- Mary will work steadily at her microfilming job for hours at a time if someone stops by and checks in with her several times an hour. When no one comes by for an hour or so she often wanders away from the job.

The next examples involve frequently heard comments. For example, "It's not good to praise Charles because every time you do he stops working, and when you leave he bangs the table." What probable function does banging the table serve? Answer: He may be asking you to stay with him.

- "It's not good to let Annie have her radio at break because she always throws a tantrum when you have to take it away."

____

____

- "Follow the schedule exactly with Alex. Whenever anything doesn't happen on time he gets very upset".

____

____

Summary

This chapter has examined some steps in doing the detective work to figure out why someone engages in challenging behaviors. The process begins by identifying the challenging behavior and doing a "cost-benefit" analysis to determine if the behavior should be changed. Sometimes behaviors can be changed by addressing the physiological or environmental conditions that influence them. Other times, the reason for a challenging behavior can be found in the function it serves for the person. It's important to know how often and under what circumstances the behavior occurs so we can assess the function the behavior serves for the person. Once this has been done the next step is to determine how to go about teaching alternatives that the individual can use to achieve what he or she needs using more appropriate behaviors. The next chapter discusses this topic in further detail.

Questions to Ponder

- Think about your own work environment: what types of environmental conditions exist there that sometimes affect your own behavior? What have you done to help minimize those conditions?
- Think about a challenging behavior that is often exhibited by someone close to you (student, child, spouse, relative). What function do you think the behavior serves for the person?
- Think about some of the reasons people have challenging behaviors: do you think these reasons cause you to have challenging behaviors too?
- The next time you're confronted with a behavior you consider to be challenging, what steps will you take to deal with it?

4

Chapter Four

Alternatives to Challenging Behaviors

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39 **Section 1 Putting it in Practice**
50 **Section 2 Overcoming Avoidance**
56 **Summary**
57 **Questions to Ponder**

Introduction

As we've discussed, most challenging behaviors serve a definite function for the individual. In many cases, these behaviors have proven to be an effective means by which the individual can get what he or she wants. Challenging behaviors are often very difficult to change when: 1) they're more effective than the alternative behavior, 2) they have a long history, and 3) the natural response of the environment to the behavior is reinforcing to the person (e.g., someone who greets he sees because he likes when people verbally respond to him). When the above factors exist, our programs will need to not only treat physiological conditions, minimize the effects of environmental conditions, and teach alternative behaviors, but will also need to manage specific reinforcement (or consequences) of the challenging behavior.

Upon completing this chapter, you will be able to:

- Demonstrate an understanding of how to pin-point challenging behaviors.
- Identify strategies for teaching alternative behaviors.
- Demonstrate an understanding of managing reinforcements.

Section 1

Putting it in Practice

Pinpointing the Behavior

The first step in teaching alternative behaviors is to is to pinpoint (or define) the challenging behavior you wish to change. Pinpointing is the process of selecting a behavior to reinforce. It's important to carefully select the behavior to identify its functions as well as to monitor success in decreasing it.

Let's look at some examples: which of the following are behaviors? Keep in mind that a behavior must be both observable and measurable.

Is it a behavior?	Yes	No
• John hits Sue.	☑	☐
• Mary is angry at Jeff.	☐	☑
• Fred is mad.	☐	☑
• Alice scratches her leg.	☑	☐
• Freida throws a tantrum.	☑	☐

Discussion 1

Why are challenging behaviors so difficult to change? How do you pinpoint a behavior? Why is pinpointing an important first step in the process of teaching alternative behaviors?

Activity 1

Students will read this list of twenty words and choose whether or not the behaviors are both measurable and observable. If the answer is no, students will provide alternative behaviors under the "example" column. The first ten will be done as a practice exercise, with the second ten done as an individual activity.

Discussion 2

Why is it important to determine the function of a challenging behavior? What questions should you ask yourself when determining the function of behavior? What common characteristics should you look for when choosing alternative behaviors to teach?

Activity: Pin-pointing Challenging Behaviors

The twenty words or phrases listed below may or may not be specific behaviors. If the behavior is both measurable and observable behavior check "Yes", if not, check "No", and list a possible specific behavior in the right column. Do the first ten as a practice exercise; the second ten will be done as an individual activity.

Part 1

	Behavior	*Specific?* Y	N	Example
1	Hits peers	☑	☐	
2	Is aggressive	☐	☑	
3	Is depressed	☐	☑	
4	Throws books	☑	☐	
5	Bangs head	☑	☐	
6	Makes sexual advances	☑	☐	
7	Hallucinates	☐	☑	
8	Kicks others	☑	☐	
9	Shows aggression	☐	☑	
10	Is sneaky	☐	☑	

Part 2

	Behavior	*Specific?* Y	N	Example
11	Threatens coworkers	☑	☐	
12	Is self-injurious	☑	☐	
13	Slaps self in face	☑	☐	
14	Attacks others	☑	☐	
15	Bites wrist	☑	☐	
16	Is upset	☐	☑	
17	Touches breasts	☑	☐	
18	Yells at others	☑	☐	
19	Has fits	☑	☐	
20	Sets off others	☐	☑	

Determining the Function of the Behavior

Understanding the function of the behavior is crucial to the process of changing challenging behaviors. Sometimes this process is as easy as asking the individual what he or she needs or wants at the time the challenging behavior occurs. When individuals are unwilling or unable to share their reasons for behaving in challenging ways, we must make educated guesses as to the function of the behavior. When determining the function of behaviors ask yourself the following questions:

- Is the person's behavior a result of a physiological condition?
- Is the person's behavior a result of an environmental condition?
- Is the person trying to obtain something?
- Is the person trying to keep an object?
- Is the person trying to gain access to an activity?
- Is the person engaged in self-stimulation?
- Is the person trying to avoid a task?

Selecting Alternative Behaviors

Once the function of the challenging behavior has been determined, the next step in teaching alternative behaviors is the selection of the alternative behavior(s). For John, who doesn't want to do certain types of assembly work, some appropriate alternatives might be to:

- Say he doesn't want to do this job.
- Suggest improvements in the job that would make it better: "I don't like to do this because my chair is too low."
- Suggest a preferred job that might be available.
- Negotiate a settlement: "I will do this now if I can work on a preferred job later."

Finding alternative behaviors may take more than one attempt. Your search will be more successful if you keep these factors in mind:

- **Choose behaviors that are easy to do.** The first thing to look for is a behavior the person can do or can easily learn to do. If the alternative behavior is too hard, the individual will generally just do what worked before. This is a key concept for successfully teaching alternative behaviors. "Too hard" can mean different things. If the person doesn't do the "right" thing at the right time, additional learning is needed. Making sure the person can do the behavior at the right time is essential to this behavior change approach.

  In the example above, John doesn't want to do certain types of assembly work. If he has good verbal skills, he may be able to verbally state that he doesn't want to do the job and that he'd prefer to do a different assembly job. Staff should review with John the possible alternatives and when they can be used. As much as possible, this should be done in the natural setting (in this case, at work) where the actual interaction will most likely take place. A role play of the situation to provide John some practice in using alternatives should also be done to get an accurate idea about whether or not John will be able to use the alternatives. However, until you see John successfully use the alternatives in the natural setting when faced with a type of assembly work he doesn't like to do, you can't be certain John can actually perform the behavior.

- **Choose behaviors that are "functional".** The second important aspect is that the behavior must be functional. To be functional, the alternative must be accepted by others and work for the individual. To work means people will respond to the alternative behavior to meet the person's needs.

  It often helps to review the possible or probable scenarios with others prior to situations in which John is likely to use the skills you have taught him. Otherwise, they may be unaware of the options John may ask for, and will be less likely to respond in a consistent manner. If John doesn't get what he wants by verbally requesting it, he may resort to the behavior he already knows will work: hitting others, throwing work materials, or some other behavior which has been successful in getting him what he wants. Remember – you need to "sell" John the idea that he should use "new and improved behaviors."
- **Choose behaviors that are acceptable.** The third factor to consider is how well will the behavior be accepted. Accepted refers to the community. It refers to people other than those people who are part of the team. We have discussed the importance of learning behaviors that will work for the person in the course of his or her normal daily schedule and community interactions.

These three factors – ease of the behavior, its functionality, and acceptance – are listed in priority order. If the behavior can't be easily done, the others don't matter. The ideal behavior will meet all three criteria.

Discussion 3

How can challenging behaviors be anticipated and minimized? Why should we teach alternative behaviors the students already knows and serves a function? What teaching strategies should be used when teaching alternative behaviors?

Teaching the New Behavior

Now that you've selected alternative behaviors, the next step is to get the person to use the alternative behaviors in place of the problem ones. The first step is to review the functional assessment and determine the conditions during which the challenging behavior is most likely to occur. The best time to teach the alternative behavior is when the behavior is needed, which includes the times, places, and conditions in which the challenging behavior is used now. Thus, by determining the conditions that lead to the problem behavior, we can identify when this will be. In addition, we want the individual to use the alternative behavior instead of the problem one, not after it. If we can anticipate the problem behavior, we can prompt alternative behaviors in these situations.

One way to anticipate the occurrence of a challenging behavior is to identify antecedent behaviors. As we reviewed earlier in this session, an antecedent behavior happens before the problem behavior. Consider some more examples:

- When faced with fine motor assembly tasks John generally mutters about how he hates it. If nothing changes, after a few moments he'll start to scream.

- When faced with a new job, Gilbert will generally try to do it. When he has trouble he gets frustrated and will start to work faster and faster. This generally hasn't worked and so he starts to bite his hand.
- When Mary Alice starts hearing voices she'll look around and then put her hands over her ears. After several moments of this she'll start to scream.

These antecedent behaviors can become signals for prompting the alternative behaviors. There are three things we might do when the individual does the antecedent behaviors. First, we might ease the situational demands, if those are part of the problem. Second, we also might redirect the person away from the setting events. The antecedent behaviors should be our signal that we need to do these things now. The third step is to prompt the alternative response. The antecedent behavior is a signal that this is the time the alternative behavior is needed. There are several methods for teaching the alternative behaviors.

In teaching the alternative behavior we'll use all of the teaching skills we have learned. Differential reinforcement, shaping, and communication strategies should all be used to teach the alternative behaviors. The first thing is to make sure the person knows how to do the behavior. Remember one of the criteria we used to select the alternative behavior was that it be a behavior the person can already do or can easily learn. In selecting our strategy to teach the alternative behavior, it's important to decide when to teach the behavior. It's easier to learn this behavior when not faced with a situation that normally results in problem behavior. Such situations are often stressful for the individual. If we are going to teach Gilbert to ask for help (verbally or by turning on a light on his work station), it will be easier to practice before he is upset. This might be done by giving him a difficult task and having him turn the light on as we prompt him. If he communicates verbally, we might try to role play the situation with him. This means we should practice before situations occur and practice again once the person is calm afterwards.

In addition to these, we'll also watch for the antecedent behaviors and prompt the alternative when this happens. This may mean that we allow the person to stop working at times he or she is scheduled to work. It may mean we allow people to have things at times or in quantities we would normally find inappropriate. This is necessary at first, so the person can learn that the alternative behaviors work.

Possibly the most important part of the methods for teaching the alternative behaviors is to make sure they work. Gilbert may have asked for help in the past. Frank may have requested more positive interactions. Charles may have asked for attention. But the way this was done was not successful. If the alternative behavior doesn't serve its intended function, there's no reason for the individual to continue to do it.

The final topic in teaching alternative behaviors is the response to the problem behavior. We have already discussed some crisis management techniques. The first thing we must ensure is that no one gets hurt. If the individual is engaging in self injury or becoming aggressive, we need to block and protect the person and other people and then the environment. If the individual is going to hurt himself or someone else we must step in and prevent this. Unless otherwise specified by the behavior program this is always the first priority.

Once people are safe, the next response to the challenging behavior should be similar to the response to the antecedent behaviors. Back off a little, redirect the person away from the situation, and prompt an alternative behavior. There are times to take a more direct approach as we have previously discussed; again, the way you handle crisis situations is often a matter of school and agency policy, and your employer should provide you with information and training on handling these situations.

Managing Reinforcements

Three strategies for managing reinforcement can be helpful when working with individuals who are learning alternatives to their challenging behavior. These include:

- Limiting reinforcement for challenging behaviors.
- Adding reinforcement for positive behaviors.
- Using differential reinforcement to reinforce positive behaviors while ignoring challenging ones.

Let's explore each strategy in further detail.

Limiting Reinforcement

Reducing Attention: The first method to limit reinforcement is to reduce the social reinforcers (attention) received for a challenging behavior. If a primary function of the behavior is to get attention, we may need to control that attention. For example, we may need to ask visitors to only interact with Joe on breaks from work. But when Joe starts interactions at appropriate times and through appropriate ways, it's important to give him attention. In this way the appropriate alternatives work and are functional.

Sometimes it's hard to ignore some behaviors because they may be self-injurious and aggressive. In this case, it may be necessary to block Jane's head hitting without giving her attention, withholding it until times when she engages in desired behaviors like making eye contact and starting a conversation.

Another way to control social reinforcers is to get peers or people in other settings to cooperate with our efforts. For example, if Marta talks out in class to get attention from her classmates, getting them to ignore the behavior can be very effective.

Controlling Tangible Rewards: If the natural reinforcement is tangible, we may need to control tangible reinforcers by making sure the challenging behavior isn't rewarded. For example, if Bill hits Jill to get the radio back, it may be important that he not get the radio following the hit: he can get it back later through appropriate alternative behaviors. If David threatens to run away if he doesn't get a doughnut, how might we limit tangible reinforcers for this problem behavior?

Removing People from Reinforcers: The last method for limiting reinforcement is to remove the person from the reinforcer. If social attention or social reactions are the consequences that reinforce the problem behavior, we may need to remove the chance of attention from the teaching environment. This may mean separating two individuals who can't get along or removing the person from a social environment as a consequence of the challenging behavior.

If, for example, we determine that Mary stops working on her lessons to impress certain people, we might require her to go work by herself when she begins flirting. This would remove the chance that someone will give her the attention she seeks.

Remember that doing something like having Mary leave her work area is a restrictive procedure and – depending on the decisions of the interdisciplinary team, the type of procedure, and the way it's implemented – it might constitute a regulated or controlled procedure under Minnesota law. Removing the person from a reinforcing environment becomes a form of time out. Any program of this type would only be implemented in combination with a program to teach and reinforce alternative behaviors.

Activity: Limiting Reinforcement

Let's practice the methods for limiting reinforcement. In the following examples, provide the naturally occurring reinforcer for the challenging behavior and how we could limit reinforcement in each case.

- For half of his school day, Ed works at a local bank sorting mail. When he runs out of mail, he bangs his hand on the table. The selected alternative behavior is getting more mail on his own. He'll do this after a few minutes of hand banging.

  Reinforcer: ____________________

  Limits: ____________________

- Esther, a seven year old girl with severe physical and mental disabilities, eats her lunch with the other kids at her school. Jennie, one of the older children, has befriended Esther and they really enjoy eating and interacting together. When Jennie spends time with other people in the cafeteria, Esther moans, cries, and makes loud vocalizations. Jennie will usually go over and calm her down. The selected alternative behavior is using appropriate social interaction behaviors.

Reinforcer: ____________________

Limits: ____________________

Adding Reinforcers

The second strategy for managing reinforcement involves the use of added reinforcers. Naturally occurring reinforcers typically don't occur often enough or are too hard to control, in which case we may want to add extra reinforcement to the environment.

The normal rate of reinforcement in the "real world" is pretty low. Look at our typical work environment: we're not often told we're doing a good job and are paid only so often – and what we get paid usually isn't as much as we'd like. It's easy to see why a lack of consistent positive reinforcement is one of the primary reasons some people don't do well with normal reinforcement.

In our first session, we learned how providing feedback on what is and isn't correct is a very important function of reinforcement. For this and other reasons, we often add extra reinforcement to our teaching environments, which helps people learn alternatives to challenging behaviors.

These added reinforcers may be easier to control than the natural reinforcers and may be strong enough to overcome the reinforcement that the individual is receiving naturally. One way to do this is to use differential reinforcement – reinforcing positive behaviors while ignoring inappropriate ones. We briefly discussed this strategy in Chapter Two; now let's examine it in detail.

Differential Reinforcement

Show Transparency 4.1

Earlier, we discussed how consequences control most behavior. Many of the objectives developed through the planning process involve increasing or strengthening behaviors that are currently performed inconsistently. When an individual knows how to do something and does it at least occasionally, simply reinforcing the desired behavior may encourage the individual to use it consistently. For example, if Judy is often late coming back from break but is sometimes on time, reinforcing coming back on time should increase that behavior. This in turn, will decrease how often she comes back late. Reinforcing a desired behavior while ignoring an undesired one is called *differential reinforcement*.

Differential reinforcement is the heart of positive programming. This is one of the most desirable approaches to strengthen appropriate behaviors while decreasing undesirable behaviors at the same time. Differential reinforcement can be a very effective way to provide feedback and to motivate individuals to perform desired behaviors.

Consider the following example: Mary talks out in class to get attention from her classmates. We could pay special attention to her – or, better yet, having classmates give her attention – when she doesn't talk out as a form of differential reinforcement. In either case, she receives more attention than normal for not engaging in her talking out behavior. To effectively use this technique, the following three guidelines should be kept in mind.

Guidelines for Using Differential Reinforcement

There are three main things to do when using differential reinforcement:

Show Transparency 4.2

- **Maintain prompting and criticism at the lowest level.** Differential reinforcement works because it's reinforcing. Prompts and negative comments reduce some of this effect. There is no need to prompt Alice to comb her hair or straighten up her clothes when we are reinforcing her.
- **Make reinforcement attainable.** Differential reinforcement works because appropriate behavior is reinforced while inappropriate behavior isn't. It's important for reinforcement to occur frequently to speed the learning process. For this reason, set the criteria for reinforcement at a level the individual can reach without too much difficulty. When Alice is going to a school dance, she always looks clean, her hair is done up, and her clothes look nice. Yet on some school days, her hair may be combed but her clothes are disheveled. In working with Alice you noticed that she is more likely to comb her hair than to wear nice clothes. Start with wearing nice clothes, and add the other behaviors one at a time. You don't need to require perfection – you're looking for improvement. Many times differential reinforcement fails because too much is required too soon and reinforcement doesn't occur often enough.
- **Increase criteria for reinforcement at a pace allowing reinforcement to remain attainable.** For example, as Alice begins to dress more conscientiously each day, the requirements for reinforcement might be increased; she was receiving reinforcement if she wore clothes without any holes in them, and now she must wear clothes that are wrinkle-free and don't have holes in them. If this is successful, you could increase the criterion again, and reinforce Alice for wearing wrinkle-free clothes with no holes and combing her hair before she comes to class.

  When changing the criteria for differential reinforcement for Alice we added more behaviors to the criteria for reinforcement. Instead of adding more behaviors differential reinforcement can be used to motivate a person to do a behavior better, faster, or more often.

Consider some examples where differential reinforcement is used in these ways.

Let's go back and find out what happened with Fred. After leaving the institution and coming to work, Fred began to yell and throw objects when he didn't want to do an assigned task. His supervisor taught him more appropriate alternative behaviors, but Fred still screamed when he thought he was treated unfairly. Fred's challenging behavior is yelling and throwing objects which is reinforced by avoiding nonpreferred tasks. There are several different approaches that could be taken to help Fred reduce this behavior.

A method for controlling the natural reinforcer might be to not let him avoid the task when he yells or throws things. A method for differentially reinforcing other behaviors would be to praise Fred every hour he goes without yelling or throwing things. A method for differentially reinforcing an alternative behavior would be to give him a different job when he asked for it but not when he gets upset. A method for removing him from a reinforcing environment would be to not challenge him with any tasks he doesn't want to do. This means he wouldn't use the challenging behavior and so it wouldn't be reinforced. Another would be to only request him to do nonpreferred jobs when a supervisor is present who doesn't let him avoid the task. This would remove him from a situation in which the behavior will work.

Activity: Selecting a Method for Managing Reinforcement

In this small group activity, which should take about 40 minutes, you will have two examples of situations with an challenging behavior. You will need to identify the targeted problem behavior, the function it serves, and the reinforcer for the behavior. Then you will need to describe a method for controlling the natural reinforcer, for differentially reinforcing other or alternative behaviors, and for removing the person from the reinforcing environment. Once these have been identified, your group should discuss the three different solutions and select one or more you think will be the best choice, and describe why you made this decision.

- **Problem 1:** Alice works in an elementary classroom on a reading activity. She sits across the work area from her friend, Marvin. When he talks to other children, she gets mad, quits working, and will often throw her materials at him and/or the other children. When this happens, Marvin generally looks at her and goes back to work.

  Problem behavior: Alice throws materials.

  Function of problem behavior: *To get Marvin to stop talking to other children.*

  Reinforcer for problem behavior: *He stops.*

Method for managing natural reinforcement: *Marvin doesn't stop.*

Method for using differential reinforcement: *Talk to Alice when she doesn't throw materials.*

- **Problem 2:** Felicia is a soft-spoken woman who can independently shop for groceries. She likes to have help selecting the right cut of meat and will stand at the meat counter and wait for someone to notice her. If they do, she'll ask for help, telling them what she wants to cook. If no one approaches her, she'll rap on the counter with her cane. She's already broken one pane of glass by doing this. When someone approaches after she raps, she'll say, "I want some damn service now," and tell them what she wants.

  Problem behavior: *Bangs cane.*

  Function of problem behavior: *Gets service.*

  Reinforcer for problem behavior: *Gets attention and help.*

  Method for managing natural reinforcement: *Don't give her attention when banging.*

  Method for using differential reinforcement: *Help her when she waits without hitting.*

  Method for removal from reinforcing environment: *Make her leave store.*

- **Problem 3:** When Monica needs to use the restroom, she'll throw her school materials and bite her arm. When staff see this, they ask her what she wants and she signs "toilet". They escort her to the restroom.

  Problem behavior: *Throws materials and bites arm.*

  Function of problem behavior: *Goes to restroom.*

  Reinforcer for problem behavior: *Gets help to toilet.*

  Method for managing natural reinforcement: *Don't help her when throwing or biting.*

  Method for using differential reinforcement: *Help her when she signs "toilet" without throwing or biting.*

  Method for removal from reinforcing environment: *Take her on a schedule.*

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Section 2
Overcoming Avoidance

The previous section looked at ways to change naturally occurring positive reinforcement. The function of many challenging behaviors is to avoid doing something or to escape from a task or situation. For some individuals, avoiding work, social interactions, or basic self-care responsibilities may be a significant barrier to independence and integration. It may also be that avoiding these is so strong that reinforcing alternative ways to do these behaviors isn't sufficient to overcome this tendency. In these cases it may be necessary to take special steps just to overcome this avoidance.

Behaviors that are maintained by negative reinforcement can be extremely difficult to change. These behaviors are usually difficult to ignore, and it's often easier to let the person avoid the activity or demand than it's to ignore the behavior. Some staff may be consistent in providing alternatives and getting the person engaged in desirable activities. If the behavior has been used many times in the past, the individual may try the avoidance behavior with different people. If even some people allow him or her to avoid the task, this will reinforce the behavior on a variable schedule. Behavior maintained by reinforcement on variable schedules is even harder to change than behavior maintained on a frequent or fixed schedule. Thus, the natural tendency is to let someone avoid a task – and if avoidance occurs at least some of the time, the motivation to avoid remains strong. For these reasons, it often takes special efforts to overcome avoidance.

Show Transparency 4.3

We'll look at three strategies to overcome avoidance. The first strategy is to make teaching decisions based on long-term progress instead of short-term issues. Sometimes short-term decisions may seem counter-productive unless considered in a longer perspective. We'll discuss each of these strategies in more detail after reviewing the list of strategies. The second strategy is to make the avoided situation more reinforcing so the person will want to do it. The third strategy is similar to the second. We need to make the avoided tasks more reinforcing.

Base Teaching Decisions on Long-Term Progress

Show Transparency 4.4

The first strategy addresses the moment to moment decisions we make to handle situations. These decisions should be based on the individual's long-range goals, and the primary objective of programs to overcome avoidance should be to reinforce non-avoidance behavior. In other words, we want to reinforce the person for being in the nonpreferred environment or doing the non-preferred task. The first idea is to focus on one thing at a time: select the most important objective and reinforce that without withholding reinforcement because of failure to meet a second objective. For example, David doesn't like to go the vocational work room; he actively fights people who try to get him to go there. Once in the work room he sometimes hits and kicks to leave. Other times he may go to the work room and really enjoy the work he learns in vocational class.

In this example there are three different behaviors that could be reinforced:

- David will go to work area.
- David will stay in work area.
- David will work steadily.

David generally doesn't want to do any of these things: he wants to go someplace else. What do we do? If we focus on one thing at a time, the first objective might be to get him to go to the work area when requested. We might give him a Coke when he gets there to reinforce this. We might suggest he go to the work area and, if he complies, reinforce him enthusiastically when he arrives. If he wants to leave, however, we should let him. Some people might suggest that allowing him to leave the work area and not making him do the work is wrong. But our one objective is to go to work. Once he goes to work regularly we can start requiring a short stay and build this into longer and longer work time. In this way we may get him working steadily for most of the day without ever fighting him to do it. In the end he may want to work.

Make Things Easy

The second idea is to make things easy. In many cases avoidance is linked to frustration with the task, low reinforcement rates in the avoided environment, or infrequent reinforcement for the avoided task. It's critical to set achievable expectations for people. When the individual does challenging behavior to escape the task or activity, it's important to set criteria for the alternative behaviors that are easy to meet. In David's case all we required was a single simple response. This increases the chance of reinforcement. The more reinforcement he receives for the alternative behavior the more he'll want to do it.

Relax Requirements for Old Behaviors

The third strategy involves relaxing the requirements for old behaviors when new ones are started. For example, when we're first getting David to come to work we might reinforce him – by giving him a cup of coffee – anytime he shows up at work. Later we might reinforce him when comes to work only when he's on time. After he's regularly on time we might start requiring him to sit at the work table for a couple of minutes before he gets his coffee. During this phase it would be okay to reinforce him for sitting at the table even if he was a few minutes late. This approach is similar to the rules for shaping and for minimizing the effects of setting events.

Making Environments Reinforcing

Show Transparency 4.5

A second aspect of the overall program strategy is to make the avoided environment or task as reinforcing as possible. The first idea involves increasing the available reinforcement in the avoided environment and for the avoided task. For example, with David we increased the reinforcing value of the environment by moving his morning coffee into the work environment. Increasing the reinforcement value of an environment may be done in other ways.

The second idea for increasing the reinforcing value of the environment is to decrease the reinforcing value of competing environments. When David wants to leave the work area, it's partially because he doesn't want to be there and partially because he wants to be somewhere else. We increase his desire to be at work by increasing reinforcers (e.g., putting his morning coffee at work) and we can decrease his desire to be in other places by not having coffee available anywhere else.

The third strategy to overcome avoidance is to decrease the punishing aspects of the avoided environment. This can be done by presenting demands in non-threatening ways and decreasing the frustrating parts of the task or environment. Often when an individual is avoiding a situation, it becomes a power struggle between the individual and the staff person trying to get the individual to do something. In these cases the individual may simply be trying to exert control over her life. When someone asks her to do something in a loud, strong, or forceful tone of voice, she may simply react against the control. The first part of a positive approach to overcoming avoidance is to give control back to the individual and set the environment up in such a way that the person will want to respond. For example with David, we ask him if he wants to go to work and reinforce him for going instead of making him go. This increases his control over the situation and hopefully his motivation to attend.

The second idea is to decrease the punishing characteristics of the avoided environment by decreasing task frustration. If the task is difficult, it's probably not reinforcing. When someone tries to avoid a hard task they may be telling you it's frustrating. Try simplifying the task. For example, we would only ask David to go to the work area at first.

The third idea is to remove annoying stimuli. If the chair is too high or low or too hard or soft, it can make the task more punishing. If someone sits across or next to the individual and bothers him, he won't like the activity as much. If the room is too hot or cold or the sunshine is in his face he may not want to do it.

Now let's look at some programs to overcome avoidance responses. This small group activity is like the first one. Each group has an example and your task is to address each of the issues we just discussed. David leaves the area after a short while.

Small Group Activity: Programs to Decrease Avoidance Responses

Directions

In this small group activity we'll be looking at strategies for decreasing avoidance responses. Each group will have several problems to address. First identify the challenging behavior and an alternative behavior. Develop a task analysis of the alternative behavior. Discuss a reasonable step in this task analysis as the focus of your initial efforts. Suggest ways to increase reinforcement and decrease punishment for the alternative behavior. Select a second step in your task analysis. One team member should be prepared to report to the class.

- **Problem 1:** Willy is very noncompliant about brushing his teeth. Every time someone tries to brush his teeth, he'll hit, kick, and try to bite the person doing it. Staff generally back off and about once a week three or four people hold him down to brush his teeth. He may lose teeth soon because of neglect. This is a controlled or regulated procedure, and the team would prefer to use a positive approach.

  Problem Behavior: *Refuses to brush teeth.*

  Alternative Behavior: *Brush teeth.*

  Task analysis of alternative behavior goals:

  1 *Gargle.*

  2 *Rub gums with cotton swab.*

  3 *Put brush in mouth.*

  4 *Brush teeth.*

  Select an alternative behavior to focus on: *Gargle.*

  How can you increase reinforcement for doing the alternative behavior?
  Add praise or any additional reinforcer.

  How can you decrease punishment for alternative behavior?
  Make task easier, letting him choose to do it.

  Once the first alternative behavior is mastered, what will you do next?
  Rub gums with cotton swab.

- **Problem 2:** Freida works in a community vocational program. Some days her job is to package pet food kits. Freida seems to enjoy this and works most of the time. Other days her job is to inspect cans of pet food for dents. On these days her production rate is very low, she often sleeps, and if pushed, will throw cans. She needs to inspect cans at least one day every two weeks.

Problem Behavior: *Sleeps and throws cans.*

Alternative Behavior: *Inspect cans.*

Task analysis of alternative behavior goals:

1 Inspect cans for short time.

2 Inspect cans for longer time.

3 Inspect cans at higher rate.

Select an alternative behavior to focus on:
Inspect cans for two hours.

How can you increase reinforcement for doing alternative behavior
Increase rotation of attention, allow to go to preferred job after two hours.

How can you decrease punishment for alternative behavior?
Don't push for production.

Once the first alternative behavior is mastered, what will you do next
Increase time to three hours.

- **Problem 3:** Betty refuses to go to group activities in the game room of the apartment complex at night. Her psychiatrist believes that her withdrawal leads to increased psychosis and may result in hospitalization. She enjoys some craft projects but when pressed to do them shuts herself out and doesn't listen. She enjoys going out to eat with one particular person but this probably can't happen often enough to meet her goal for socialization.

Problem Behavior: *Refuses to go to activities.*

Alternative Behavior: *Attend some activities.*

Task analysis of alternative behavior goals:

1 Go to area, out to eat.

2 Do short task, out to eat.

3 Attend several days, out to eat.

Select an alternative behavior to focus on:
Go to area.

How can you increase reinforcement for the alternative behavior?
Go out to eat afterwards.

How can you decrease punishment for alternative behavior?
Only stay short time, let her choose.

Once the first alternative behavior is mastered, what will you do next?
Do short task before going out to eat.

Differential reinforcement depends on the individual already knowing how and when to do the behavior. One way to find out if the learner knows how and when to do the behavior is to offer a huge reinforcer for the behavior. If the individual does the behavior correctly you know that the behavior doesn't have to be taught. The individual just needs to become more motivated. Individuals may not be doing the behavior regularly because it's too hard or because it's more reinforcing to not do the behavior. Let's look at two examples:

- John is learning to drill holes in aluminum plates as part of his job training for when he graduates from school. He often produces at 35% of a typical rate but at other times produces less than 20% on the same job.
- On some days Alice comes to school looking neat and well-dressed, while other days her hair is uncombed, her clothes have holes, and she smells like she hasn't bathed in a while.

In both these cases, providing reinforcement for the instances of desired behavior will help strengthen those behaviors.

Behavior Contracts for Alternative Behaviors

Show Transparency 4.6

"Good behavior" contracts are made with individuals to accomplish positive behaviors while not engaging in challenging behaviors. This short look at contracts won't prepare you to develop contracts because there are many other things to consider. Contracts can be a powerful tool for behavior change, but are easy to use incorrectly. The purpose of including a discussion of contracts here is to introduce the topic and a few of the key concepts.

The first important aspect of a contract is selecting the behaviors and reinforcers. These need to be negotiated between the individual and person managing the contract. This should be treated much as in a work contract: that is, if the individuals does these things he or she will be paid a given amount. It's important that the behaviors be something the person can reasonably accomplish and that the "pay" be something that can fade to a natural consequence. For example, when the positive behaviors are selected, they should be something the person has demonstrated the ability to accomplish.

John, for example, is able to clean his work area in Home Economics, but almost never does so. To set the criteria for cleaning the work area every day for a month sets him up for failure. A better way to handle it might be to set the contingency at three days a week for a while, and then to increase this to five days a week, and then to six as he begins to do his homework more regularly.

If Rachel has an average of ten tantrums a week, asking her to go for a month without a tantrum is unreasonable. In fact, having none for a week isn't likely to occur. The contact might be to have fewer than three instances in a week. The payoffs should also be reasonable. By making the behavioral contingencies reasonable, you improve the chance of success. In addition, the reinforcement should be one that the individual could reasonably set for herself and might fade to a self-reinforcement program. In this case you might set the reinforcer as a trip out to eat if the person has a good day, week, or month. This would be something she might do for herself later.

The second idea about behavior contracts concerns how to deal with the challenging behavior. It shouldn't be a big deal if the student doesn't reach the goal in the contract. The instructor's comment should be like, "Oh, too bad – you didn't do it this time, but that just means it's time to start working on the next one." It's generally of little value to make people feel bad about engaging in the challenging behavior; our attention should stay focused on achieving the desired behavior.

The third idea has to do with how we talk about the contract. It shouldn't be used as bribery, which is – at best – a short-term solution. One of the most effective ways to handle talking about the contract is to set up environmental events or stimuli to prompt the behavior. A check-off sheet that can be reviewed for accomplishments of routine tasks is a great way to do this. For example, John needs to clean his work area. Staff requests for cleaning are setting events for challenging behavior. On the other hand, John is very interested in the reinforcers in his contract. A card with a picture of tasks that must be checked off by staff as they are done can be a very effective way to handle these prompts.

Finally, a great idea for all contracts is to develop the type of fading steps discussed earlier, with the idea that the individual will begin to manage his own behavior. For example, John might begin to mark his own card with some spot checks for accuracy.

Summary

This chapter has highlighted steps that can be taken to replace challenging behaviors with more appropriate ones. The first steps in this process are to pinpoint the behavior and to determine what function it serves for the person. Next, you must select an alternative behavior you intend to teach the individual. Choosing behaviors that are easy to learn, acceptable to others, and serve the same function as the challenging behavior will be most effective.

Once you've taught the alternative behavior, you must turn your attention to managing the reinforcers that surround the behavior. This can be done by adding or limiting reinforcement and/or by using differential reinforcement to reinforce positive behaviors while ignoring challenging ones. Regardless of which strategy you decide to use, it's important to be patient with yourself as well as the individual with whom you're working. Change is a slow and difficult process which, through time and hard work, can be very rewarding.

Questions to Ponder

- You're working with a student who constantly gets out of her seat. How could you use differential reinforcement to reinforce an alternative while ignoring the out of seat behavior? What alternative behavior would you choose?
- John has just been hired at a local hardware store. Everyday after lunch he sits down and refuses to work. This behavior generally lasts about thirty minutes. His employer doesn't know what to do and asks for your assistance. What do you do in this situation?

5

Chapter Five

Using Behavioral Interventions with Students

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Introduction

In the previous chapters, we've defined behavior, identified strategies to understand and respond to behavior, and discussed the importance of using positive strategies to support challenging behavior. This chapter provides students with information regarding laws which identify procedures that can and cannot be used to address those challenging behaviors exhibited by individuals with disabilities.

Upon completing this chapter, students will be able to:

- Demonstrate an understanding of the difference between exempted, prohibited, and regulated procedures.
- Demonstrate how to use regulated procedures.
- Demonstrate an understanding of the steps to take in an emergency situation.

Section 1

Using Behavioral Interventions with Students

In 1989, the Minnesota State Board of Education was directed by the legislature to adopt rules governing the use of aversive and deprivation procedures for pupils with disabilities. Aversive procedures use negative or unpleasant stimuli or consequences to stop a behavior. Deprivation procedures delay or withdraw goods, services, or activities that the child would otherwise receive if an identified behavior occurs or in an emergency situation

The Board was asked to draft rules to promote the use of positive behavioral interventions, and to ensure that aversive or deprivation procedures, when appropriate for a student, are included in that student's Individual Education Plan (IEP). The rule, which went into effect in January 1992, is intended to encourage the use of positive approaches to modify students' behavior.

Three categories of behavioral interventions – exempted procedures, prohibited procedures, and regulated procedures – are listed in Minnesota's Proposed Permanent Rule for Use of Behavioral Interventions with Pupils Who Have Disabilities (MN Rule 3525.2925).

Each school district must revise district policies, where necessary, and to provide any necessary staff development to appropriately implement the new rule. Each district should distribute their written discipline policy during IEP meetings, and review common practices in terms of appropriateness for a particular student.

Discussion 1

What is a *deprivational* or *aversive procedure*? What is the difference between prohibited, regulated, and exempted procedures? How are regulated procedures used in the schools? What steps must be taken before a regulated procedure can be implemented?

Disadvantages of Aversive Procedures

First of all, aversive procedures can result in behaviors that are worse than the original ones. For example, if you restrain someone from hitting him- or herself, you could inadvertently teach that person to become aggressive. This is a frequent result of restraints from self-injury. If the person engaging in self-injury accidentally strikes a staff member who is using a restraint, that staff person might let go. This could reinforce hitting. The positive approaches we will go over in this course don't carry this danger.

In fact, positive procedures can teach many useful new behaviors. For example, a young man named John, living at a group home, used to throw his food several times per day. A perceptive staff person noticed that whenever John disliked one thing on his plate, he would throw the whole plate. The program staff at the group home were then able to write a program to teach John to sign "eat" when staff offered him each food item separately. When John learned this new skill, he stopped throwing his food. Another advantage of positive approaches is that even if the program doesn't work, you aren't much worse off than when you started. If staff had guessed incorrectly and John continued to throw his food, they would always have the option of trying something else.

Another disadvantage of using aversive procedures is that they're difficult to fade because they're artificial in nature. We talked last time about using natural cues and reinforcers when teaching. If you use an electric shock to keep someone from biting, the procedure will only work if you still have the shocking device in sight. Positive approaches can result in natural reinforcers that will last longer. When we taught John to sign "eat" for every food item, we not only decreased his throwing behavior, but we provided him with a natural reinforcer of food. Eventually, we could teach John to serve his own food, and make the program even more natural, and increase his independence. If we had used a punishment procedure, we would have to use the procedure over and over again, with no room for independence; John would always need to have a staff by him, ready to punish.

A related disadvantage of punishment procedures is that sometimes what we think are punishers can actually be reinforcers, or can become reinforcers over time. Restraints such as arm braces or helmets or physical holds can be very difficult to fade for this reason. Individuals could also use restraints to get out of an activity. For example, a child who doesn't like gym class might act out in order to get into a time-out room.

Positive procedures, on the other hand, are easier to work with on a trial and error basis. If one procedure doesn't work, you can try another and another until you find the right solution. We will go over many examples of positive approaches to try later on. You often don't know if a punishment is going to be reinforcing until you've tried it, and then it might be too late. For example, the child trying to get out of gym class may act more and more inappropriately until time-out or another restrictive procedure has to be used for safety purposes.

A fourth disadvantage of punishment procedures is that the people who perform the procedure can become associated with the procedure itself. This can make developing relationships with staff and teachers very difficult for the person. When this happens, it becomes harder and harder to use a positive approach. On the other hand, positive procedures can result in positive interactions with instructors, peers, and others.

Finally, punishment procedures don't address the function of the behavior. We will go over this concept in much greater detail very soon. Punishment may decrease one behavior, but if that behavior serves some need for the person – and almost all behavior does serve some need, or function – then other inappropriate behaviors might arise to serve the same need. Positive approaches can teach the person to communicate his or her needs in more appropriate ways. We will have many examples of this later on.

Rule 40 and the "Education Rule"

This doesn't mean that punishment procedures are never appropriate. When we do use punishment procedures in Minnesota, though, we have to follow specific rules and guidelines. As mentioned before, for adult and residential services, this rule is called "Rule 40" and in the schools, we will call it the "education rule".

Rule 40 was developed in 1987 order to prevent the misuse of procedures that were seen as abusive, dangerous, or dehumanizing, and to promote positive approaches to managing behavior. Later on, the education rule was added for the same reasons. According to the Department of Human Services, Rule 40 has resulted in a decrease in the use of aversive procedures in Minnesota, and an increase in positive procedures. The education rule should result in many of the same changes. The education rule is relatively new, but, as we have seen with Rule 40, once people get used to this way of thinking, most providers find that positive approaches work best. Positive approaches to behavior management will be the focus of most of this course.

Exempted Procedures

Exempted procedures are planned instructional techniques which are common practices in schools, and consistent with the school discipline policy. Exempted procedures may include, but aren't limited to:

- The use of corrective feedback and prompts – visual, verbal or physical cues, correcting errors, etc.
- The use of physical assistance to facilitate the completion of a

response (such as guiding a child's hand to teach a handwriting skill where there's no resistance).

- Requesting that a student leave an activity for a brief period of time, or the temporary delay or withdrawal of goods, services, or activities as a consequence of their inappropriate use.

Exempted procedures would appear on an IEP when they are used as instructional techniques to help a child meet IEP goals and objectives.

Prohibited Procedures

Prohibited procedures are those procedures which, under Minnesota law, have been declared illegal for use in schools with children who have disabilities. Such procedures may never be used by teachers or other school staff. Since they are expressly prohibited, they would never appear on a student's IEP.

The following procedures are prohibited in Minnesota for use with students who have disabilities:

- Corporal punishment – hitting, spanking, etc.
- Requiring students to stand or sit in a position causing physical pain, the use of intense sounds, lights or other sensory stimuli as an aversive stimulus.
- The use of noxious smell, taste, substance or spray as an aversive stimulus.
- Denying or restricting a student's access to equipment such as hearing aids and communication boards.
- Faradic skin shock.
- Totally or partially restricting a pupil's auditory or visual sense.
- Withholding regularly scheduled meals or water.
- Denying access to toilet facilities.

Regulated Procedures

Regulated procedures are any interventions used in a planned manner that meet the definition of an aversive or deprivation procedure (see the Definitions list in Appendix A). Regulated procedures may be permitted as instructional strategies only when positive or less intrusive methods of encouraging behavior change have been tried without success. Any regulated procedure under consideration must be clearly articulated in a Behavioral Intervention Plan (BIP), as part of a student's IEP, and can be implemented only with the signed consent of the parents or in an emergency situation. Regulated procedures include:

- The use of manual restraints.
- The use of mechanical or locked restraints (e.g., handcuffs).

- The planned use of suspension or dismissal from school.
- The use of time-out (where the student is removed from the educational program and may be placed in an isolation room or similar space).
- The temporary delay of regularly scheduled meals or water not to exceed thirty minutes (except in an emergency).

If a regulated procedure is being considered for use with a student who receives special education services, a professional with expertise in the use of positive approaches to behavior management must be a member of the IEP team.

Time-Out

One of the most frequently used regulated procedures is time-out. Exclusion time-out occurs when a child is removed from his or her regularly scheduled educational program. Seclusion time-out is when a child is placed in a specially designed isolation room. The use of time-out must be addressed in a Behavioral Intervention Plan as part of a child's IEP. A time-out room must have an observation window for continuous monitoring, have smoke and fire monitoring devices, be well lit, clean, heated, and ventilated, and must measure at least five by five feet.

Assessment

An assessment must be performed before any regulated behavioral interventions are recommended or initiated. The assessment must examine the purpose of the intervention, the effect of the behavior exhibited by the student, and its seriousness. The assessment summary must describe:

- The behavior for which a regulated procedure is recommended.
- A baseline measurement of the behavior.
- Documentation of two positive behavioral interventions, and any extra interventions attempted and their effectiveness.
- A review of frequent use of exempted procedures (e.g., sitting in the hallway or being sent to the principal's office).
- Documentation that other treatable causes for the behavior have been ruled out (health, medical, etc.).
- What alternative procedures have been considered and ruled out and why; *and*
- A description of the proposed regulated procedure.

Positive Behavioral Interventions

Before any regulated behavioral intervention can become a part of the IEP, the school must: document that it has tried and was unsuccessful with positive approaches to manage the offending behavior, and show that the purpose of the intervention is to enable the student to develop appropriate skills. (The use of regulated procedures should not be considered to eliminate unwanted behaviors, or for the convenience of staff.)

If the two positive behavioral interventions have not been successful in meeting the IEP goal a team meeting must be convened to review the student's IEP. If the IEP team decides that the use of a regulated procedure is necessary to meet the goal, the procedure must be written into a Behavioral Intervention Plan (BIP) in the IEP. The BIP must list:

- The target behavior and a baseline measurement of its frequency and severity.
- A description of the proposed behavioral intervention procedure.
- The conditions under which the procedure will be used.
- An explanation of why the procedure was chosen.
- A statement of expected behavior changes that will occur.
- A description of any discomfort, risk or side effects.
- The conditions or circumstances under which the intervention can or must be discontinued prior to team review.
- The anticipated effects on the student if the procedure isn't used.
- Who will implement the program.
- The team review and evaluation date, not to exceed two months.
- Coordination with home or care facility; and
- The parent's informed consent (which may be withdrawn at any time by notifying the program administrator; the procedure must be stopped immediately upon parental request).

Parental Consent

Parents must be contacted within three days of their having withdrawn consent to the Behavioral Intervention Plan in the IEP, to determine the need to review and amend the BIP and the need to convene an IEP meeting for a change in placement or program. If parents are divorced but have joint legal custody, informed consent must be obtained from both parents before using a regulated procedure.

Independent Review Committee

An Independent Review Committee must be available in each district as an option for either parents or school staff, to review the Behavioral Intervention Plan (BIP). The team must contain at least two members who are not employees of the district. Parents may appoint one member of the team, if they desire. Districts must inform parents of their right to request a review; the responsibility of the committee is to review relevant assessment and make recommendations regarding the Behavioral Intervention Plan. The decision must be a provision for continuous monitoring of the child during time-out, the criteria for the child's return to his regular activities, access to water and restrooms if time-out exceeds fifteen minutes, and documentation of the number of occurrences of time-out and the length of time for each time-out. Time-out rooms must be safe for children, with walls and floors covered to guard against injury. Light switches must be outside. The Review Committee is advisory only and has no power to override the decision of the IEP team; it should be viewed as a "second opinion" when either the parent or the school has concerns regarding the planned interventions for a particular child. The committee must include persons who are knowledgeable about cultural and ethnic issues as well as about behavioral interventions.

Activity: Assessment Summary Checklist

Working in small groups, address the items in the checklist below. Responses may be based on an imaginary student or loosely on students with whom you've worked. If you choose to base your responses on real students, keep all names confidential.

- What is the behavior for which a regulated procedure is recommended?
- Describe two positive behavioral interventions you completed to address this behavior. How did they work? How did you document them?
- Provide a list of all frequently used exempted procedures (e.g., sitting in the hall way, being sent to the principal's office)
- What other treatable causes for the behavior have been ruled out (medical, environmental etc.)

Activity 1

Students will use the Assessment Summary Checklist to work in groups to address all six items on the list. Answers may be based on an imaginary student or loosely on individuals with whom students have worked. Remind students that if they decide to base their answers on real students they must keep all names confidential. Students will share their answers with the class upon completion of the activity.

- What procedures heave been considered and ruled out and why?

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____

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- Provide a brief description of the proposed regulated procedure.

____

____

____

Section 2

What to Do in an Emergency

Discussion 1

What are the steps involved in handling emergency situations? How can emergencies be averted?

In the case of emergencies, regulated procedures may be used to protect a student or other person from injury, emotional abuse, or to prevent severe property damage, even if those procedures are not written into the IEP however, emergency procedures that are used twice or more per month require that a team meeting be called to see if the IEP continues to meet the needs of the child.

Any time a regulated procedure is used in an emergency (any time that its use hasn't been planned in the IEP), district administration and parents must be notified immediately. Here's a hierarchy of seven steps in determining what to do in emergencies.

Follow the Written Program Plan

The first step is to always follow or attempt to follow the written program plan before trying any other type of intervention. You should vary from the written plan only in extreme cases. If you see instances where the program plan isn't working, you should bring this up so that new programs or efforts can be tried consistently.

Ignore the Behavior

If there is no plan, or if the plan doesn't work, the safest course is to ignore the behavior. This can help insure that you don't reinforce the behavior, if the person is trying to gain attention, and poses the least risk to you and to the other person.

Use Non-Verbal Strategies

If you must respond to the behavior, try a non-verbal strategy first. Position yourself between the person who is upset and other vulnerable persons in the room. Keep an alert posture with your arms at your sides, feet apart, knees slightly bent, and ready to move in any direction.

Use Simple Verbal Cues

Try verbal engagement or redirection. For example, if Gerald is getting very upset, you could ask him if he wants to sit and read a magazine (if this is something he enjoys). You're usually better off if you can direct the person to a positive activity. It's very important to remember to keep your verbal cues to a minimum; use short and direct sentences. For example, say, "Sit," or "Sit on the couch," rather than, "I know how upset you must be right now, so sit down on the couch and relax a little, and when you're calmer we can talk about what's bothering you."

Use an Escort

Next, you might have to use a physical escort to remove the person from the area. If the person resists, this could count as a manual restraint under Rule 40 and the public school rule.

Use Manual Restraints

You can use manual restraints if this is the only way to keep the person who is upset and other vulnerable persons safe.

Call for Emergency Services

If all else fails, you can call 911. This should only be used as a last resort.

Provided by PACER Center, Inc., 4826 Chicago Ave. S., Minneapolis, MN 55417, 612/827-2961. Refer additional questions you may have to PACER Center.

Activity 1

Students will work in small groups to brainstorm ways that emergency situations can be prevented before they occur. When finished, groups will share their ideas with the class.

Summary

This module has focused on positive approaches of dealing with individuals' behavior. A main reason for focusing on positive approaches is that regulated and restrictive procedures don't address the function of the behavior. In other words, the person is trying to communicate with his or her behavior. Simply punishing one behavior won't make the underlying communication problem go away. Positive approaches are better able to teach the person how to communicate his or her needs effectively for long term changes.

There are times, however, when it's necessary to take quick and more extreme measures with students who are exhibiting challenging behaviors. Examples of such times would be if a student is threatening to hurt him- or herself or someone else. In these cases, it's important to know exactly what behavioral interventions you may or may not use. If you're not already, become familiar with

Discussion 2

Why are positive procedures always preferential to aversive ones?

your school or organization's policies regarding behavioral interventions and how to use them

Questions to Ponder

- Your supervising teacher is using time out with a student to reprimand him for his talking out behavior. You know that this procedure hasn't been discussed by the team and is definitely not written into his individual education plan (IEP). What do you do?
- You see two students involved in a heated verbal argument in the hall, what do you do?

Appendices

69 **Appendix A: Definitions**

Appendix A
Definitions of Controlled or Regulated Procedures

The Use of Manual Restraint

Restraints are the most commonly used controlled procedure. Restricting a person's movement using physical force is manual restraint. This includes escorts, such as having two people walk someone from the classroom to the hallway. There are two things to remember if you're using physical contact. First, it may only be used if the person is resisting, and second, Rule 40 specifies that if the contact lasts for sixty seconds or longer while the person resists, it's a restraint.

For example, Ben doesn't like to brush his teeth, so two staff people drag him to the bathroom while he is pushing away, shouting, and swearing. This is an inappropriate use of a manual restraint. It's not a life-threatening emergency, and certainly would *not* be an appropriate procedure to use as part of a person's program plan.

The rules do allow a certain amount of brief physical contact in the natural flow of daily activity. For example, Tim comes out of his room biting his hand, a sure sign that he's about to aggress, and you briefly take his arm, turn him around, and tell him to look at magazines – an activity he enjoys. However, holding Molly's hands behind her back for ten seconds every time she hits herself as part of a program plan would be considered a manual restraint and would have to follow all of the procedures to be included as part of her individual education or program plan.

In adult services, the use of manual restraint is much easier to identify than with young children because greater physical force is needed with adults. One common mistake is to think that restraints for small children are O.K. because they don't require a great deal of physical effort to hold. If the child is resisting, however, it's still a restraint. Holding a child or an adult immobile doesn't teach him or her anything, and should be limited to only the most severe cases. Improper restraints have caused broken bones, torn ligaments, and even death. You should never perform a restraint unless you have had specific training.

Mechanical or Locked Restraints

According to the training manual on the education rule, "mechanical or locked restraints are at times used to stop a pupil's pattern of behavior that is serious and poses a high risk of injury to self or others. Restraints such as mittens, Velcro cuffs, and similar devices should only be used under the most serious of circumstances and with assurances from the pupil's physician that it's safe to use such devices. Best practice suggests that the intervention plan include the methods to be used to fade out the use of restraints," (Minnesota Department of Education, 1992).

The Planned Use of Suspension or Dismissal

In the public schools, the planned use of suspension or dismissal from school is also regulated. This type of intervention can only be used as part of the student's Individual Education Plan. There are other federal and state laws regarding suspension that your district should know. What you need to know is that sending a student home from school is a serious issue, and your school should have policies to deal with this.

The Use of Time-Out

"Time-out" is short for "time-out from positive reinforcement." Time-out procedures can be from mildly intrusive exempted procedures to highly intrusive prohibited procedures. This type of intervention has been the subject of a great deal of controversy. You cannot use time-out as an emergency procedure: it has to be part of the persons individual education or program plan. Persons must be monitored at all times when in time-out, and all uses of time-out must be documented. Isolation rooms must meet certain safety requirements. The training manual on the education rule documents a number of issues to consider with the use of time-out:

> "Time-out isn't appropriate for all pupils or all problems. Research on the use of time-out documents positive effects across a wide variety of behavior problems. There is also long-standing and perhaps growing controversy regarding the misuse and abuse of time-out...
>
> "Time-out may be ineffective or even paradoxical in that it can serve an avoidance function, or as negative reinforcement, by providing a means for a pupil to avoid another activity that he or she perceives to be aversive or undesirable. For example, pupils who have difficulty with certain academic work or social situations may act out in order to escape. The use of time-out in these instances may actually reinforce and ultimately increase such behavior. In other instances, time-out may provide opportunities for pupils to engage in more reinforcing behaviors like self-stimulation.
>
> "Time-out can be harmful. For example, some pupils, when placed in time-out, engage in self-injurious behavior and if left unsupervised will harm themselves. In other instances, the process of escorting an angry, aggressive pupil

> to time-out may place the pupil and/or the staff at risk of injury. Finally, time-out could be implemented in a manner that is harmful to pupils due to the degree of exclusion. The worst case would be where pupils are left in isolation rooms for extended time periods, even hours. There are no absolute time limits on the use of isolation or exclusion procedures but the most effective time-out procedures are very brief, lasting five minutes or less..."
>
> *Minnesota Department of Education, 1992*

Some of the milder forms of time-out are exempted. For example, planned ignoring or extinction programs are one form of time-out that isn't considered a regulated or controlled procedure. We have already talked about contingent observation and temporary interruption. This is when you take a person away from an activity to a place where they can still observe others engaging in the activity and receiving reinforcement. According the training manual on the public school rule, "time spent with other persons doesn't necessarily fit the definition of time-out as removal from reinforcement opportunities. Exclusion of pupils from their class in this way may serve to provide an immediate alternative instructional and learning opportunity" (Minnesota Department of Education, 1992). Another exempted procedure similar to time-out is the use of a "quiet room," where the person chooses to go to an area in order to regain self-control. As long as the person chooses when to go and when to come out, it's not a controlled procedure.

Rule 40 distinguishes between *exclusionary* time-out and *room* time-out. In exclusionary time-out, the person is removed from an ongoing activity, but not necessarily to a special time-out room. A person's bedroom, or living area where the person can not engage in preferred activities or leave when he or she wishes could all be forms of exclusionary time-out. Room time-out, sometimes called separation, involves removing a person from an ongoing activity to an unlocked room. Under Rule 40, the door to this room cannot be locked, but it can be blocked by staff persons.

We really don't have time to explore this issue in depth, but we can go over a few examples. Ralph, who is mainstreamed into a third grade classroom is becoming very upset because he doesn't understand what is going on with the unit on reading. The aide removes him from the class and goes to another small room with fewer distractions to work on reading at his own pace for a while. This isn't time-out because someone is with him, and he can still earn positive reinforcement. Another example might be when Janet is at her workshop and tips over a table with her work materials. The staff person directs Janet away from the activity where she can watch the other people at the workshop receive reinforcement for working. This isn't a regulated or controlled procedure because it's seen as a milder form of time-out. It should still only be used as part of a planned program for the person. Consistency is very important, and this type of intervention could pose serious problems if used in an unplanned manner. Use of a time-out room where the person is forced to go to a specific area and not allowed to leave is only one form of the regulated use of time-out. If you work at a group home, and tell Julie to go to her room because she has been yelling at her roommate and you don't let her leave when she asks, this can still be considered a time-out.

We have already mentioned under *prohibited procedures* that you must give a person access to a bathroom after fifteen minutes in time-out.

Withdrawal of Goods, Services, or Activities

According to the public school rule, temporarily withdrawing goods, services or activities is exempted only if the person was using them inappropriately, and then only for a few minutes. Rule 40 is more specific in that the planned use of withdrawing a person's access to goods, services, or activities is a controlled procedure. An example of this type of procedure would be to take away Hillary's radio when she screams. Another example of a deprivation procedure might be when Joe becomes aggressive on a day that he has plans to go out for dinner. It would be O.K. to wait until Joe calms down to leave for the restaurant, but it's not O.K. to tell Joe that because he has aggressed, that he now can't go out at all. If Joe shows a definite pattern of becoming really disruptive at the restaurant after an aggressive incident, the team might decide to use a controlled procedure in not allowing Joe to go to restaurants as part of his individual plan.

The Temporary Delay of Regularly Scheduled Meals or Water

The last controlled or regulated procedure under the education rule is the temporary delay or withdrawal of regularly scheduled meals or water not to exceed thirty minutes. If you're going to withhold a person's meal or beverage for longer than a few minutes, it has to be part of the person's individual program or education plan. You cannot deny someone a regularly scheduled meal or water for longer than thirty minutes.

Other Controlled Procedures

Rule 40 has two other controlled procedures not covered by the public school rule. These are:

- **Positive Practice Overcorrection:** This is a procedure that requires a person to demonstrate or practice correct forms of a behavior for a length of time or a rate that is greater than normal. For example, making a person stack sixty chairs for throwing one. Or making a person practice "shaking hands" with everyone in the room for striking one person.

- **Restitution Overcorrection:** In this procedure, the person is made to return the environment to a condition better than when it started. For example, if Jenny writes on her desk, making her clean *all* the desks, or if Fred spills his milk, making him clean the entire kitchen.

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Resources

References & Resources

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Transparencies

Behavior is any observable, measurable act of an organism.

1.1

Antecedents are objects or events that come *before* a behavior.

Consequences are objects or events that occur *after* a behavior and are *contingent* on the behavior.

The A-B-C Model

$$A \longrightarrow B \longrightarrow C$$

Antecedent **Behavior** **Consequence**

Positive Reinforcers

- Follow behavior
- Occur contingent on behavior
- Increase behavior
- *Add* something

Negative Reinforcers

- Follow behavior
- Occur contingent on behavior
- Increase behavior
- *Remove* something

1.5

Punishers

- Follow behavior
- Occur contingent on behavior
- Decrease behavior
- Can be positive or negative

Stimulus Control

When a person responds to a specific antecedent with a specific behavior

1.7

Rules of Stimulus Control

1 The behavior occurs immediately upon presentation of the antecedent.

2 The behavior does not occur in the absence of the antecedent.

3 No other behavior occurs in the presence of the antecedent.

Steps in Selecting Reinforcers

- Identify appropriate reinforcers
- Determine their effectiveness
- Monitor continued effectiveness

Identifying Possible Reinforcers

- Ask the person what he or she likes
- Observe the person making choices
- Observe what he person does
- Ask someone who knows the person well
- Have the person sample reinforcers

Schedules of Reinforcement

Interval: Based on the amount of time since the last behavior

Ratio: Based on the number of behaviors

2.3

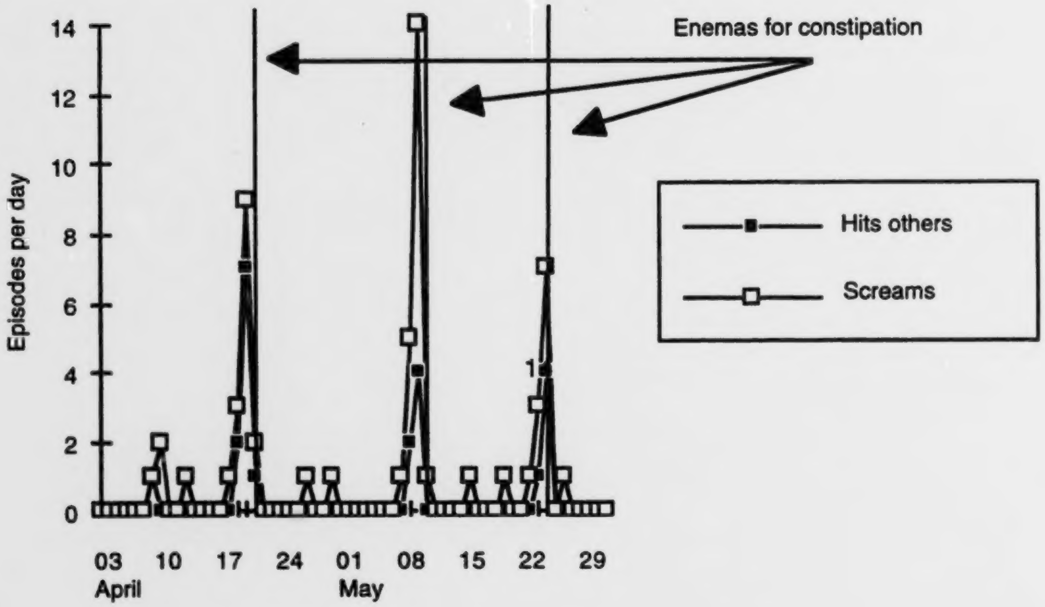
The Three Factor Theory

There are reasons for challenging behavior. These can include:

1. Physiological conditions
   (*Sickness, medication, hunger*)
2. Environmental conditions
   (*Loud noises, extreme heat/cold, time of day*)
3. Functional consequences
   (*Benefits of the behavior*)

Ways to Minimize Psychological Conditions

- Recognize physiological conditions
- Anticipate & prevent condition
- Detect problems early
- Notify & treat


Enemas for constipation
Episodes per day
14
12
10
8
6
4
2
0
03
April
10
17
24
01
May
08
15
22
29
Hits others
Screams

3.3

Decreasing Effects of Environmental Conditions

- Recognize environmental conditions
- Anticipate & prevent condition
- Detect problems early & respond
- Ease demands & requirements
- Redirect away from problems

Typical Functions of Problem Behaviors

Antecedent Behavior	Possible Functions
Nonpreferred task	*Avoid task*
Frustrating task	*Assistance with task*
Demanding instruction	*Escape instructions*
Not enough attention	*Get attention*
Someone else gets attention	*Get attention*
Stops paying attention	*Get attention*
Preferred person busy	*Get attention*
Wants something	*Get something*
Changes in routine	*Object to changes*

Differential Reinforcement

Reinforcing a desired behavior while ignoring an undesired behavior

Guidelines for Differential Reinforcers

- Maintain prompting and criticism at the lowest level
- Make reinforcement attainable
- Increase the criteria for reinforcement at a pace allowing reinforcement to remain attainable

Strategies for Overcoming Avoidance

- Make decisions based on long-term progress
- Make avoided environments more reinforcing
- Make avoided tasks more reinforcing

Focus for Progress

- One thing at a time
- Make requirements easy
- Relax other requirements

Making the Avoided Task More Reinforcing

- Increase reinforcement in the avoided environment
- Decrease reinforcement in competing environments
- Decrease punishing aspects of the avoided environment

Behavior Contracts for Alternative Behaviors

- Select the behaviors and reinforcers
- Determine how to handle the challenging behavior
- Decide how to talk about the contract
- Develop fading steps to self-reinforcement

Exempted Procedures

1 Corrective feedback and prompts

2 The use of physical assistance when the person offers no resistance

3 Brief time-out period or a temporary delay/withdrawal of goods or services

Prohibited Procedures

1. Corporal punishment
2. The use of noxious smell, taste, substance, or spray as an aversive stimulus
3. Requiring students to stand or sit in a position causing physical pain, the use of intense sound, light, or other sensory stimuli as an aversive stimulus
4. Denying or restricting a person's access to equipment/devices such as hearing aids and communication boards
5. Faradic skin shock
6. Totally or partially restricting a person's hearing or vision
7. Withholding regularly scheduled meals or water
8. Denying access to toilet facilities

Controlled/Regulated Procedures

- The use of manual restraints
- The use of mechanical or locked restraints (e.g., handcuffs)
- The planned use of suspension or dismissal from school
- The use of time-out (where the student is removed from the educational program and may be placed in an isolation room or similar space)
- The temporary delay of regularly scheduled meals or water not to exceed thirty minutes (except in an emergency)

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Module Four

Positive Behavior Strategies for Paraprofessionals

Prepared by
Institute on Community Integration (UAP)

UNIVERSITY OF MINNESOTA
The College of Education
and Human Development

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Introduction

An Introduction to the Series

This series should be useful to paraprofessionals and paraeducators in education as well as direct service staff in community agencies in preparing for a career or in upgrading skills while already employed. Skills needed by individuals working under a variety of titles are often similar. Our focus is on those individuals working in education, but most of the information contained in this series is appropriate for others; please feel free to adapt it where needed.

The Need for Today's Paraprofessionals

The need for paraprofessionals to work with persons who have disabilities has been growing in recent years. Increasing numbers of persons with a range of disabilities are now living in small residential settings in our communities, attending regular classes in neighborhood schools, holding jobs in local businesses, and participating in community recreation and social activities. There is a great need for paraprofessionals to provide the services and supports these individual need for community living.

By employing paraprofessionals, services for persons with disabilities are able to expand and improve the quality of assistance they provide. Some of the benefits paraprofessionals offer service agencies and consumers are:

- Expanded learning opportunities for persons with disabilities.
- More individualized attention and instruction.
- Increased opportunities for individuals with disabilities to observe and learn appropriate behaviors.
- Increased planning time for educators, supervisors, and others.
- Improved staff morale.
- Better monitoring and evaluation of persons with disabilities.
- Greater consistency in services.
- Improved parent-school relationships.
- Greater involvement of persons with disabilities in education and other settings in the community at large.
- Transportation assistance for individuals with disabilities.
- Vocational skill development for individuals with disabilities.

The Role of Today's Paraprofessional

Paraprofessionals who work with individuals with disabilities have a variety of roles and definitions, depending on the environment in which they work. The Minnesota Department of Education (MN 3525.0200, Subp. 9b) definition states that a program assistant or pupil support assistant provides services to students only under the direct guidance and direction of a regular or special education teacher or related provider, and those services must be:

- To enhance the instruction provided by the teacher or related staff in academic instruction, physical or behavior management programs, transition, and other integrated activities.
- To supplement instructional activities or to provide extended practice in instances in which the support assistant has had training from a special education or related services staff, and continues to receive ongoing direction and support from a special education teacher.

From the National Resource Center for Paraprofessionals in Special Education and Related Services (City University of New York) comes this definition of a paraprofessional:

A paraprofessional is an employee:

- Whose position is either instructional in nature or who delivers other direct services to individuals and/or their parents.
- Who works under the supervision of a professional staff member who is responsible for the overall management of the program area including the design, implementation and evaluation of instructional programs and the individual's progress.

Paraprofessionals provide services in the following areas:

- Educational programs
- Physical therapy
- Occupational therapy
- Speech therapy
- Recreation programs
- Early intervention and preschool programs
- Social work/case management
- Parent training/child-find programs
- Vocational training programs and job coaching
- Community programs
- Transition

Paraprofessionals are typically different from professionals in the amount of education, certification required for the job, degree of responsibility, and extent of supervision required.

Because the support of paraprofessionals is so essential to the success of individuals with disabilities, this series is dedicated to improving and enhancing skills for paraprofessionals.

About the Series

Whether you have years of experience working with persons who have disabilities or are just beginning, there are probably many questions you have about the role of a paraprofessional. Some concerns and questions will be very specific to your work setting, while others will be more general. This series, ***Strategies for Paraprofessionals Who Support Individuals with Disabilities,*** will cover both.

This curriculum is primarily for paraprofessionals who are (or will be) working in educational settings (i.e., special and general education). It will, however, also be useful for those in direct service settings, such as vocational programs and residential settings.

The ***Strategies for Paraprofessionals Who Support Individuals with Disabilities*** curriculum has four general, or core, training modules and three specialized modules. The core modules, designed for all paraprofessionals, are:

- Module 1: The Paraprofessional: An Introduction
- Module 2: Providing Cross-Cultural Support Services to Individuals with Disabilities and Their Families
- Module 3: Promoting Self Advocacy and Facilitating Friendships and Socialization Skills for Individuals with Disabilities
- Module 4: Positive Behavior Strategies for Paraprofessionals

The three specialized modules that address competencies needed in specific types of service settings are:

- Module 5: Early Childhood: The Role of the Paraprofessional
- Module 6: Working with Individuals Who Are Medically Fragile or Have Physical Disabilities
- Module 7: Transition: The Role of the Paraprofessional

Each module is designed to stand alone, so you may select any one that best meets your needs. However, it's recommended that everyone begin with Module 1 because it provides a basic framework for work as a paraprofessional and for the material covered in all the other modules.

The training you are about to begin will not only address the current reality for paraprofessionals working with individuals with disabilities, but more importantly, the challenges for the future in your career as a paraprofessional. Paraprofessionals aren't expected to have a total understanding of all the concepts in these modules, but the paraprofessional who has a working knowledge of these core concepts will be most effective.

Guiding Principles

Each module emphasizes six basic guiding principles for paraprofessionals working with individuals with disabilities. Those principals include:

- The individual with a disability is the ultimate locus of control and is the most important member in the decision making process.

- The family is the other primary locus of control. Family involvement is essential in any decision making process.
- The team concept is essential in setting up a plan with an individual. This team includes the individual, the family, and all those working with the individual, including the paraprofessional. The paraprofessional is an essential link between what is and what can be for the individual. The best follow-through on any plan comes from teamwork.
- The community should be the basis for all training, as much as possible. This means that, whether offering real-life examples in the classroom or working in real life situations in the community, the focus must be on the most natural setting and support possible. This is essential so the individual can make connections between what is being learned on a daily basis and the real world. This will help the individual generalize the experience to similar situations in his or her life.
- Inclusion is the goal. This means that individuals with disabilities should be included in the mainstream of society – work, school, and recreation. Devotion to such a model will create the most positive results for the individuals and society as a whole. Inclusion suggests that we can and will all benefit by learning to work and live side by side with each other.
- The most effective paraprofessional will be the individual who has a good self-esteem and is able to be assertive. The assertive paraprofessional is able to ask for support and guidance from staff.

About You: The Adult Learner

We know that the adult learner learns differently than younger learners. This training reflects that understanding. In *Strategies for Paraprofessionals Who Support Individuals with Disabilities* we respect these principles about you, the adult learner:

- You are capable and eager to learn new information.
- You have voluntarily given your consent to become a part of this training, and are spending valuable time and money in order to participate.
- You have a rich range of experiences. Therefore you learn best when new information is built upon your past knowledge and experiences. That's why we will do exercises to help you synthesize the old and new information together.
- You come to a new learning situation as a self-reliant learner who has a good idea of how you want and expect to learn.
- Your willingness to learn is based on a combination of outside forces (family, kids, job, etc.) and inside forces (your anxiety, excitement, fears, etc.). All these factors are going to affect your feelings about learning.

- You come into new learning with your own agenda. You know what you want to get out of the training.
- You have set aside time and reorganized priorities to make this learning part of your already-busy life.
- You expect and genuinely appreciate a facilitator or instructor who is well-informed and well-prepared.
- You need to get actively involved in the learning exercises to get the most out of this curriculum.
- You want to apply what you learn to your own situations. That's when it has real meaning for you.
- You need a safe, comfortable environment in which to learn.
- You want to establish networks with others who are also interested in paraprofessional skills.

Because of these facts about you, trainers will:

- Review and ask questions about what you know.
- Respect and view you as a resource.
- Create a comfortable environment.
- Expect you to take responsibility for your own learning.
- Plan opportunities to practice new skills during class.
- Give examples of how to apply information.
- Use a variety of types of instruction.
- Provide ways to evaluate training.
- Use alternate methods to help you understand.
- Give information in a logical sequence.
- Give time for you to share your experiences.
- Give you the chance to get know other paraprofessionals.

After the Training

You will leave this training with more information about paraprofessionals than you had when you started. It's important to remember that no matter how much knowledge you have about your job, the individuals you work with are your greatest trainers. Each one is unique and has his or her own interests and needs. The greatest responsibility you have is to listen to those interests and needs, remember what you have learned, ask what is needed, and use that information in your working relationship and responsibilities.

Therefore, use this training as a basis and build your skills from this point, drawing upon each setting and individual. Whether client, student, teacher, supervisor, principal, director, or superintendent, you will learn from each. With each setting and situation your confidence, ability, and skills will continue to grow. Remember, this training is only as good as the degree to which you use what you learn; seek assistance so you can "do what you know."

1

Chapter One

Behavior and the Environment

1 Introduction
1 Section 1 What is Behavior?
4 Section 2 Using Consequences When Teaching New Behaviors
4 Section 3 Using Antecedents When Teaching New Behaviors
10 Summary
11 Questions to Ponder

Introduction

Why do people behave the way they do? What motivates people to change their behavior? Is it possible to teach positive behaviors to replace negative ones? Before any of these questions can be answered, you must be able to identify the specific behaviors you want to teach or change. In addition, you must also be aware of the environmental factors that accompany those behaviors – what's going on before, during, and after behaviors occur. This chapter will focus on the relationship between behaviors and the environmental factors that affect them.

Upon completing this chapter you should be able to:

- Demonstrate an ability to identify behaviors in an observable and measurable way.
- Recognize consequences and antecedents of behaviors and understand their effect on behaviors.
- Define and recognize five learning principles related to learning new or strengthening existing behaviors.

Section 1

What is Behavior?

Behavior is defined as any act which is both observable and measurable. *Observable* means that one can see and describe the behavior as it occurs. For example, you can see Stuart throw the ball or watch Robin as she practices the piano. *Measurable* means that one can count or measure the intensity (strength) and duration of the behavior. For example, you can measure how many times Stuart throws the ball or the distance he threw it or you can time how many minutes Robin practices the piano.

Describing behaviors in measurable and observable ways is important because it enables you to communicate with others about those behaviors. If your supervisor asks you to count the number of times Siân drops her pencil in an hour, you will be able to do so because "dropping a pencil" is an observable and measurable behavior. On the other hand, if you're asked to count the times Siân gets angry in an hour, you will have a more difficult time. How will you know when Siân is angry? What behaviors will indicate that she's angry? In this case it might be better to count the number of times Siân stomps her feet during the hour: stomping feet is a behavior that can both be measured and observed.

Activity: Identifying Behaviors

Look at three examples of situations and identify the behavior in each example.

- **Example 1:** Fred sees a cookie on a plate on the table. He picks the cookie up and eats it. The cookie tastes good and he picks up and eats another one.

  Behavior:

- **Example 2:** Wayne sees a girl in the hall. He asks her for a kiss. She slaps him. He doesn't ask for a kiss in the hall again.

  Behavior:

- **Example 3:** Maggie sees the flag up on the mailbox. She goes to check the mail. There is no mail. She doesn't check the box again until the flag is down.

  Behavior:

What Goes on Before and After a Behavior Occurs

In assisting individuals to learn and use behaviors, an understanding of the relationship between behavior and the things that go on before and after the behavior is very important. Occurrences in an individual's environment provide signals to the individual about when to act. What happens before and after a given behavior determines whether the person will use the same behavior in the future. Considering these factors is important when you're either teaching a new behavior or helping an individual to learn when to use an existing behavior.

Antecedents

Antecedents are conditions, events, or objects that precede behaviors and directly cause those behaviors to occur. For example, if someone gives you a cookie (an action), you're likely to eat it. In this instance, receiving the cookie is the antecedent which preceded the behavior of eating.

Consequences

Although many things happen after a behavior, consequences result directly from the behavior. For example, if you press a selection button after putting money in a Coke machine, you get a Coke. In this instance, getting the drink is the consequence that resulted from your button-pressing behavior. Other things may happen – someone may talk to you, a fire alarm may ring, or there may be a total eclipse of the sun. None of these later occurrences are results of pressing the "Coke" button and aren't necessarily consequences (unless they happen repeatedly as a result of pushing the button).

The A-B-C Model

What's the difference between an antecedent and a consequence? The important points to consider are that the antecedent comes before the behavior and signals whether or not to act, and the consequence comes after the behavior and acts as a motivation to behave. Antecedents, behaviors, and consequences can be arranged in a logical A-B-C order:

A	→	B	→	C
Antecedent		Behavior		Consequence

In the A-B-C model, the behavior is the action the person takes when he or she sees, hears, or feels the antecedents.

Activity: Identifying Consequences and Antecedents

Look at the three examples we examined in Activity 1. Identify the consequence and antecedent in each example. How do each affect or influence the behavior?

- **Example 1:** Fred sees a cookie on a plate on the table. He picks the cookie up and eats it. The cookie tastes good and he picks up and eats another one.

  Antecedent:

  Consequence:

- **Example 2:** Wayne sees a girl in the hall. He asks her for a kiss. She slaps him. He doesn't ask for a kiss in the hall again.

  Antecedent:

  Consequence:

- **Example 3:** Maggie sees the flag up on the mailbox. She goes to check the mail. There is no mail. She doesn't check the box again until the flag is down.

  Antecedent:

  Consequence:

Section 2

Using Consequences When Teaching New Behaviors

People learn new behaviors – both positive and negative – as a result of the consequences of those behaviors. Most behaviors that are followed by pleasant consequences are repeated and thus learned, and the reverse is also true: behaviors that are followed by unpleasant consequences typically aren't repeated, and thus they aren't learned. For example, if you receive compliments for wearing a sweater you're more likely to wear it again.

Understanding how consequences influence behavior is critical in developing strategies to assist students and adults as they develop and strengthen existing positive behaviors. The following learning principles explain how consequences affect the way individuals learn new or strengthen existing behaviors. Further discussion of how to use these learning principles when working with students and adults will be contained in later chapters.

Positive Reinforcement

Positive reinforcement occurs when a behavior's consequence *adds* something desirable to a situation that makes that behavior more likely to occur in the future. Consider these examples:

- You've taken your car to the neighborhood mechanic and have repairs completed for a fair price. The next time you need repairs, you go to the same mechanic. Getting a fair price was the positive reinforcement that caused you to choose that mechanic in the future.
- A student who receives an A+ after studying for a test decides to study hard for the next test. Getting an A+ was the positive reinforcement that influenced the student to study hard for the next test.

In both of these examples, the consequences – a fair price and a good grade – added something to the situation that increased the likelihood of a behavior happening again in the future.

Negative Reinforcement

Negative reinforcement occurs when a behavior's consequence *removes* something undesirable from a situation that makes that behavior more likely to reoccur in the future. Consider the following examples:

- You wake up on the couch in the middle of the night while the television blasts the static that follows a station's sign-off. You get up and turn the television off thus removing the static. You've learned that the behavior of turning off the television removes the blaring static.

- A buzzer goes off in your car until you buckle your seat belt. Buckling up removes the unpleasant buzzing, encouraging you to buckle up again in the future.

These are examples of negative reinforcement because behaviors increased when something was removed.

Positive and negative don't refer to whether something is good or bad, only to whether or not something is added (positive) or is removed (negative). Both positive and negative reinforcement always present the following characteristics:

- The reinforcement follows the behavior.
- The reinforcement results from the behavior occurring.
- The reinforcement causes the behavior to increase.

Punishment

Punishment occurs when something happens in a situation that decreases the likelihood that a behavior will occur again in the future. Punishment doesn't refer only to bad things that happen (i.e., spanking, negative comments) but is determined by its effect on behavior. If behavior decreased due to its consequences, it was punished. As with reinforcement, punishment can include the addition or the removal of something.

It's hard to think about punishers as being "positive": actions we might consider the most severe forms of punishment (i.e., spankings, derogatory comments) fall in this category. They are presented and the preceding behavior decreases (at least for a while). We'll call this category of consequences punishment. Consider the definition again: if a behavior decreases when something is added, it's been punished. For example, you give Oliver money for mowing your lawn, which he's previously done many times for free: he was offended by being paid and doesn't mow your lawn again. The money acted as a positive punisher.

Extinction

Extinction describes a situation when a behavior decreases because it's no longer being reinforced. For example, students often call out in class to get the teacher's attention. When the teacher responds, he or she is positively reinforcing the student for calling out. If, on the other hand, the teacher ignores the student's calling out (not reinforcing the behavior) then the student is likely stop calling out in the future. The student's choice not to call out again is an example of extinction.

Activity: Behaviors & Consequences

For each of the scenarios, give a behavior, consequence, a behavior that changed, what was added or removed, the effects on behavior, and its consequences. Use the following example as a guide.

- **Example:** Fred is in the cafeteria and he flips down the coin return lever on a Coke machine. Two quarters fall out. He then pushes the coin returns on all the other machines.

Behavior	*Flips down the coin return*
Consequence	*Gets 50¢*
Behavior that changed	*Pushing coin returns*
Added or removed	*Added* (*positive*)
Effect on behavior	*Increased* (*reinforcement*)
Type of consequence	*Positive reinforcement*

- Joe cleans up his locker at the local high school. Marcus sees how neat it looks and tells Joe the locker looks great. Joe cleans his locker more often after that.

Behavior ______________________________
Consequence ______________________________
Behavior that changed ______________________________
Added or removed ______________________________
Effect on behavior ______________________________
Type of consequence ______________________________

- Joe cleans up his locker at the local high school. Marcus sees how neat it is and tells him he's a sissy for cleaning it up. Joe doesn't clean his locker again for months.

Behavior ______________________________
Consequence ______________________________
Behavior that changed ______________________________
Added or removed ______________________________
Effect on behavior ______________________________
Type of consequence ______________________________

- Joe's locker is really messy. Maria sees Joe's locker and tells him how bad it looks and smells. She teases him about it until he cleans it up. After he finishes cleaning, she leaves. He cleans his locker more frequently for a while.

Behavior ____________________

Consequence ____________________

Behavior that changed ____________________

Added or removed ____________________

Effect on behavior ____________________

Type of consequence ____________________

- Joe cleans his locker. When he gets to class, Maria tells him he missed a field trip to the Science Museum because he was in the hall cleaning his locker. Joe doesn't clean his locker again for months.

Behavior ____________________

Consequence ____________________

Behavior that changed ____________________

Added or removed ____________________

Effect on behavior ____________________

Type of consequence ____________________

Section 3

Using Antecedents When Teaching New Behaviors

The antecedent can be a very important part of the environment. In most cases antecedents tell you whether the time and situation is right to perform a behavior. As we all know, timing is a crucial part of being successful. Antecedents are the signals that tell us when or when not to do something. Knowing the meaning of antecedents can help make a person more independent. Let's go back and look at the example of Fred and the cookies.

> Fred sees a cookie on a plate on the table. He picks the cookie up and eats it. The cookie tastes good and he picks up and eats another one.

What do you think would happen if the antecedent in this example was changed?

> Fred works at a restaurant which doesn't allow employees to eat on the job. He sees a cookie on a plate at a restaurant where he works.

If Fred considers the antecedent of *being at work*, he will most likely refrain from eating the cookie. If he disregards or doesn't understand the antecedent and eats a cookie anyway, he may have to pay the consequences of getting reprimanded or even fired for breaking work rules.

If you can read antecedents correctly, you have a much better chance of being successful. For Fred, knowing when and where eating is appropriate will allow him to be successful at work and to enjoy cookies when he's at home. Being successful builds self-confidence and self-worth. In other words, if an individual knows when a behavior will be reinforced and only behaves in those situations then he or she will be reinforced more often and punished less frequently. If a higher percentage of behaviors are reinforced, the person should be more motivated to respond to appropriate antecedents in the future. People will be more motivated by the natural consequences of social interactions and will learn more on a day-to-day basis through interactions with the environment.

In the last section we described positive and negative reinforcement, punishment, and extinction – principles that describe the relationship between behavior and consequences. The following section will discuss stimulus control – a learning principle that describes the relationship between an antecedent and behavior.

Stimulus Control: Knowing When to Behave

Stimulus control occurs when a specific antecedent signals a specific behavior. For example, When Jack talks about his weekend fishing plans during a production meeting, he's demonstrating inappropriate stimulus control. Sometimes it's all right to talk about personal plans. Sometimes it's even a preferred type of conversation, but the secret is knowing when it's acceptable. This is the goal of teaching to improve stimulus control. Developing appropriate stimulus control is an important part of teaching.

Three rules must be followed to achieve stimulus control:

- The behavior occurs immediately upon presentation of the antecedent.
- The behavior doesn't occur in the absence of the stimulus.
- No other behavior occurs in the presence of the antecedent.

When teaching students about how antecedents relate to their behavior, the three rules of stimulus control will have to be taught separately. Consider the following examples.

- **Scenario 1:** Felicia is learning to clean up after meals. The current program calls for her to wipe off the table when requested.

  Antecedent: Request: "It's time to wipe off the table."
  Behavior: Felicia wipes off the table (with a sponge).

  Rule 1 is met when: Felicia starts to wipe off the table within a few seconds of the request.

Rule 2 is met when: Felicia doesn't wipe off the table at other times during the day.
Rule 3 is met when: Felicia doesn't go do something else when requested to wipe off the table.

- **Scenario 2:** Margaret is learning to use the city bus to get home from school. She rides Bus 43.

  Antecedent: Bus 43 stops at the bus stop.
  Behavior: Margaret gets on the bus

  Rule 1 is met when: Margaret gets on bus 43 as soon as it arrives at her stop.
  Rule 2 is met when: Margaret doesn't board other buses when they arrive at her stop.
  Rule 3 is met when: Margaret doesn't go do something else when bus 43 arrives.

Activity: Is it Stimulus Control Yet?

In the next group activity you first have three scenarios. Your task is to determine if stimulus control has been established. If it hasn't, you need to specify what changes in behavior would have to occur for stimulus control to be met.

- **Example:** Fred sets his alarm to ring at 6:45 so he can get up and get ready for work. About once each week he goes back to sleep and staff must wake him up or he'll be late for work.

  Antecedent: *Alarm rings*

  Behavior: *Fred gets up and gets ready for work*

  Is stimulus control developed? Yes ☐ No ☑

  If not, what behavioral changes must occur for the rules of stimulus control to be met?
  Fred must get up each morning and get ready to go to work.

- **Scenario 1:** Mary works at the local printers. Her job today is to inspect five different cards, reject the ones that have defective printing, and to insert the set in an envelope sent to prospective customers of the printer. She does a pretty good job inspecting the cards (only missing 4 in 100 defects), always puts five cards in the envelope, and always closes the envelope correctly.

  Antecedent:

  Behavior:

  Is stimulus control developed? Yes ☐ No ☐

  If not, what behavioral changes must occur for the rules of stimulus control to be met?

- **Scenario 2:** Allen has learned to greet people by standing directly in front of them, establishing eye contact, extending his hand, and saying "Hi, it's good to see you" or "Hi, how are you today?" He had been greeting people with hugs. He never greets people with hugs anymore, and greets everyone he sees at his job, while shopping, and at home with this new greeting.

  Antecedent:

  Behavior:

  Is stimulus control developed? Yes ☐ No ☐

  If not, what behavioral changes must occur for the rules of stimulus control to be met?

- **Scenario 3:** Sally is learning to get her own work materials. When she starts to run out of materials she will often get up and go get more materials. At other times (when running out of materials) she will get up and ask the supervisor for more materials.

  Antecedent:

  Behavior:

  Is stimulus control developed? Yes ☐ No ☐

  If not, what behavioral changes must occur for the rules of stimulus control to be met?

Summary

Understanding the reasons why people choose to behave in certain ways is an invaluable tool for paraprofessionals and professionals working with individuals with disabilities. Being able to identify behaviors in an observable and measurable way will help communicate about those behaviors and to target them for reinforcement or change.

This chapter discussed five major learning principles that operate when people learn new behaviors. Positive and negative reinforcement, punishment, and extinction are principles that describe the relationship between behaviors and the consequences that follow them. Stimulus control describes the relationship between behaviors and the antecedents that precede them.

These learning principles can be applied when assisting individuals as they learn new or strengthen existing behaviors. The following chapters will explore ways to put these principles into practice.

Questions to Ponder

- In your own job, what types of consequences are set up to encourage you to follow work policies?
- What positive consequences can you list?
- How has positive reinforcement affected your behavior in the past?
- What types of antecedents or consequences have you been aware of when learning or teaching new behaviors in the past?

2

Chapter Two

Creating Positive Learning Experiences

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25 Questions to Ponder

Introduction

A primary goal of all teaching situations should be to get the learner engaged, interested, and excited to participate. Creating an interesting environment and schedule of activities is the first step in this process.

In Chapter One, we discussed several learning principles that influence the way individuals learn new behaviors. Of these principles, positive reinforcement is the most important tool we have in developing and maintaining motivation and in teaching people to be more independent and productive. This chapter will examine some general guidelines to follow when creating a positive learning environment. We'll also look at the specific components that must be considered when planing a positive reinforcement plan for students with whom you work.

Upon completing this chapter, you should be able to:

- Identify and define different types of reinforcers.
- Select and evaluate reinforcers based on the effectiveness, timing, size and schedule of the reinforcement.
- Identify ways to create positive learning experiences

Section 1

Guidelines for Creating Positive Learning Experiences

Make Environments More Reinforcing

There are many different ways to make environments more reinforcing. People have experimented with everything from painting the walls pink (to give everything and everyone a warm glow) to using background music. The results show that making the environment a pleasant place to be makes people want to come there and stay. Clearly, an attractive environment is an important part of making an environment more appealing.

Choose Tasks at Which Individuals Can Succeed

It's important to choose tasks which individuals can accomplish and be successful. This doesn't suggest we should avoid giving people challenges, but addresses the fear of failure and frustration which often prevent people from trying new things. If we can ensure people can succeed and be reinforced through success, we increase the chance of engagement. Thus, when we set up activities, we want to challenge people to do some of the activity themselves but select steps from the task analysis the person can accomplish easily.

Give Individuals Control Over Activities

Giving people some control over the activity increases their motivation to participate in a task. For example, Brittany doesn't like to eat many foods and often doesn't want to eat supper with other people in the group home. What often happens is that she refuses the offered meal and will eat cereal later. When given a chance to choose food before the meal (with the exception of the cereal) she'll often choose a nutritious menu (although different from the group), fixes it herself, and enjoys eating with the group. When preparing for spring cleaning, Jack and Jill are very resistive to their assigned tasks. When given a chance to choose tasks, they're able to choose a fair share of the work and accomplish it without incident.

Balance Preferred and Non-Preferred Activities

The third idea is to look at the activities offered and try to maintain a positive balance between those that people really like to do and those that are less preferred but still necessary. In some ways this works because you always have something good to anticipate. In others, it works because the overall balance is positive, which makes this a good environment. This strategy can be effective for most people. For people with shorter attention spans, the activities should be changed more often.

Reinforce Individuals Often

Giving people a lot of positive reinforcement is a good way to get them motivated in the task at hand. Interestingly, it's not how much reinforcement is provided (you don't need to provide larger and larger reinforcers), but how often they're provided that makes a difference. Smaller reinforcers given more frequently are often more effective for getting people involved. Research has shown that providing positive feedback on a random basis helps increase engagement and learning. For example, the teacher who sincerely provides positive feedback frequently will experience decreases in challenging behavior and increases in engagement and pro-social behaviors.

One of the most effective ways to work with a group of people is to rotate attention around the group fairly rapidly. This keeps everybody involved and results in high rates of engagement and lower frequencies of challenging behavior. For example, Jake is a paraprofessional in a special education resource room. He has five students at different levels of independence in the tasks they do. Every five to ten minutes he'll walk around the area giving positive feedback to everyone who is working. For those who aren't working, he waits until later when he spots them working and then comments on their positive production.

Provide Positive Feedback

When working with students it's very important to provide many more positive than critical comments. Some research has suggested that, on average, people are motivated most when they receive four positive comments for every negative one they hear. A review of the value of comments finds that when a negative comment is given with a positive comment, that the overall effect is negative. So when Harold says to Jan, "I like the way you made the bed. You did a nice job of dusting. Your dresser drawers are closed, but I wish you'd pick the clothes up off of the floor," the overall impact is generally like receiving a negative comment. Even a comment like, "You're doing a good job but might try this differently," is generally taken negatively. A good way to handle this situation is to occasionally give short positive comments without suggestion about areas for improvement and then at other times give suggestions for improvement.

Section 2

Developing a Positive Reinforcement Plan

Improving Communication Through Positive Reinforcement

One of the most valuable outcomes of using positive reinforcement is that it improves and encourages communication between instructors and learners. The presentation of the reinforcer is a form of direct communication between the instructor and the student. For example, if a student is given a sticker for staying in his or her seat, the reinforcement (sticker) tells the learner that he or she was successful in meeting the instructor's expectations: "My behavior was correct; it was appropriate – and it worked!"

Reinforcement also gives the individual an opportunity to communicate what types of objects or events he or she prefers as reinforcement for good behavior. For example, a student may have to tell the instructor that he or she would prefer "more computer time" rather than a "sticker" as reinforcement for getting 100% correct on the test. Remember, something is only a reinforcement if it increases the likelihood of the behavior occurring in the future. Chocolate candies are reinforcement for most people, but not for those who are allergic to chocolate.

Lastly, reinforcement builds rapport between instructors and learners. Everyone wants to be around people who reinforce them. As a result, the learner will be motivated to work with the instructor delivering reinforcement which will naturally increase the number of opportunities for interaction and learning.

Selecting Appropriate Reinforcers

We know that what works as a reinforcer for one person may not be a reinforcer for others. Susan may love playing baseball and work hard for the opportunity to play. Morgan may despise baseball and try to avoid it at all costs. Thus, selecting reinforcers for an individual is a very important programming decision. There are three important steps in the selection and continued use of a reinforcer. The first step is to identify appropriate reinforcers. The second step is to determine the effectiveness of the reinforcers. The third step is to continually monitor the effectiveness of the reinforcers selected.

Types of Reinforcers

The first thing to consider when selecting possible reinforcers is the type of reinforcer to use. There are four types of reinforcers that can be selected when using positive reinforcement.

Tangible Items

Tangible reinforcers are physical items. Food, jewelry, clothing, records, etc. are all tangible items that can be used as reinforcers. They can be seen and held. Joe may be given a book as a consequence for requesting a book. Shauntae may get a cookie after she helps make them.

Attention

Attention is often a powerful reinforcer. Verbal praise, high fives, or time to talk are all types of attention that can be reinforcers for some individuals. After Alonzo independently cleans his desk, you may tell him how responsible he is and what a good job he's done. After Lee has completed assigned homework, you might spend ten minutes discussing sports.

Success

Success at something can make you feel good and make you want to do the behavior again. Hitting a home run during a baseball game can make you feel great and will probably encourage you to play again. Even if no one congratulates you, you feel good about playing ball. On the other hand, if you strike out every time, you may not play baseball again for a while. One way to increase future behavior may be to be sure the individual is successful in doing at least some parts of the behavior during every session.

Access to an Activity

Access to an activity can serve as a reinforcer for some individuals. As a consequence for requesting help in turning on the stereo, Kate will be able to listen to music. A shopping trip, a lunch at a neighborhood restaurant, or the opportunity to go bowling can be powerful reinforcers. A vacation would be an activity reinforcer for many of us. Some insurance companies give vacations to employees as a reinforcer for selling a certain number of insurance policies.

Step 1: Identify Possible Reinforcers

The first step in the process of selecting a reinforcer is identifying a range of possible reinforcers. There are several ways to do this:

Ask the Person What He or She Likes

If an individual has good communication skills, ask the person what he or she likes. Most people with a wide range of experiences can quickly identify food or tangible items they would like, activities they would enjoy, and kinds of attention they would enjoy. For example, in searching for a reinforcer for John's program to use the microwave oven, you might ask John what he would like to learn to cook. When asking, you can use open-ended questions (e.g., "What would you like to cook?") or more structured questions (e.g., "Would you like to make pizza or coffee?").

Observe the Person

A second way to identify potential reinforcers is to observe the person in situations where choices are offered. Things that the person chooses are probably things that the person enjoys or likes. If when given a choice at breakfast between orange juice and grape juice, Jaimael always reaches for orange juice, you might select orange juice as a reinforcer for signing juice. You can also get ideas for reinforcers by watching what kinds of activities the individual does during unstructured time and by observing responses to ongoing activities. If you see that Kelsey frequently spends her free time listening to the radio but rarely watches television, you can be pretty sure that listening to the radio is a more reinforcing activity than watching television.

Ask Someone Who Knows the Person Well

Another approach to identifying potential reinforcers is to ask someone who knows the person well if they have ideas. People who have known an individual for years have had more opportunities to observe the individual and to develop a broader range of possibilities than you could develop in a short period of time. Family members or friends often have great suggestions for tangible items or activities. They may often suggest things which are not present but that could be made available.

Have the Person Sample Reinforcers

A final way to select reinforcers is to have the person try potential reinforcers. There are many foods and other tangibles, activities, and social situations that individuals may never have tried. By providing opportunities to try these, new reinforcers may be identified. A person who has never gone to a movie wouldn't know if he or she likes movies or not. Some individuals are reluctant to try new things. You may need to encourage them to try an activity or item several times non-contingently. Observe the individual's response to the activity. After exposure to the activity or item on a few occasions, it may become a reinforcer.

Once you have identified several potential reinforcers you may want to determine which might be preferred by systematically pairing items. If you know that Ryland likes Coke, orange juice, and milk, you could find out which is the most reinforcing in the following way. Give Ryland the choice between Coke and orange juice six times, the choice between Coke and milk six times, and the choice between milk and orange juice six times. The drink Ryland chooses the most often is probably a more preferred reinforcer and will probably work best.

Step 2: Determine the Effectiveness of Reinforcers

The second step in selecting reinforcers is to determine the effectiveness of the reinforcers already identified. We can begin this step by considering some factors in the selection of reinforcers. These factors may influence how effective a potential reinforcer may be. Thus considering these factors before trying out the possible reinforcers may save some time.

Access to Reinforcers

This is an important factor. We might find, for example, that Mary Alice really likes chewing gum and thus it might be a good reinforcer. If her brother gives her several packs every day, gum may not work as a reinforcer. On the other hand, gum might be a powerful reinforcer if isn't readily accessible. A good use of gum as a reinforcer might be in a program to teach Mary Alice to make independent purchases.

Determine Motivation and Deprivation Levels for the Reinforcer

Motivation deals with how much of the potential reinforcer the person wants and how often he or she wants it. *Deprivation* addresses how often he or she gets it and in what amounts. It may be that something is a great reinforcer, but only once a day. A banana split may be a great reinforcer, but most of us can eat only so many in a day and still want more. If you're trying to teach a new behavior, you may need many reinforcers per session and thus selecting one big item isn't a good choice.

It's important to recall that individual rights limit us from removing normal access to items or activities for the purpose of increasing their reinforcing value; for example, limiting a person's access to drinking water in order to increase the effectiveness of juice as a reinforcer is a violation of that person's individual rights.

How Easy is the Reinforcer to Use?

Some reinforcers, like a field trip, can't be delivered immediately. Others, such as dinner during snack time, may be inappropriate. Any reinforcer you can't deliver probably isn't a good choice. For these reasons, social praise can be a very good reinforcer. You always have it with you, people usually don't get tired of it, it's easy to administer, and its use is generally appropriate.

Use a Variety of Reinforcements

Using a variety of reinforcers (tangible, attention, success, and activity) will help maintain attention and motivation to the task at hand. People get tired of the same old thing. It's often more effective to use a variety of new activities rather that using an old activity over and over again. In addition, changing reinforcers is often more effective than using the same one repeatedly. The novelty of seeing, hearing, or holding something new and different may also be reinforcing for some students.

Timing of Reinforcements

Immediacy of reinforcement is a critical element in developing a new behavior. To be most effective, a reinforcer should be delivered as soon as possible after the behavior. If the reinforcer is something you can deliver immediately, do it within seconds after the behavior occurs.

For example, Martin requests to listen to music. Since making requests is one of Martin's objectives, you turn on the music immediately after the request. If you don't, Martin might do something else and the reinforcer may follow this other behavior.

When you can't deliver the reinforcer immediately you can bridge the time by giving social praise immediately, e.g., saying "You did a great job. I'm going to take you to the science museum next week," and telling the person what will happen later. Sometimes points, tokens, or pictures of earned items or activities can be given immediately and exchanged later for the actual reinforcer. For example, Owen might earn a picture of a piece of pizza for attending class each day. He can then later exchange the picture for an actual piece of pizza.

The reinforcer should be delivered after the response. Reinforcers are not nearly as effective when used as a prompt or cue for behavior. If you tell your son that he will get a dollar for cleaning his room, you may provide an incentive for cleaning the room today. He probably won't clean his room next time just because it's dirty. He is probably going to wait until he can get a dollar. On the other hand, if after your son cleaned his room you gave him a dollar, he is more likely to clean his room independently in the future (while perhaps hoping for payment).

Scheduling of Reinforcement

Scheduling is another important aspect to consider when using positive reinforcement to teach or change behaviors. The *schedule* refers to how often the reinforcer is delivered. Recall that to be effective, reinforcers are delivered immediately after the behavior occurs. In some cases the reinforcer is delivered every time the behavior occurs, but most often it's delivered less frequently. When the individual is first learning a behavior, we often reinforce each correct behavior to help the individual learn quickly. Reinforcing every behavior is called *continuous reinforcement.* Some people mistakenly believe that if a behavior is taught using positive reinforcement you will always need to use reinforcement for each behavior. Reinforcement is very important at first but can often be gradually reduced once a behavior is learned. This is achieved by knowing how to use schedules of reinforcement.

Very few behaviors are naturally reinforced every time they occur. For example, in using the telephone, sometimes you're reinforced with conversation, but at other times the line is busy or no one answers. Just because no one answers, you don't stop using the phone. In fact, you probably use the phone more to complete your calls. On the other hand, every time you turn on the light switch you expect the light to go on. If it doesn't, you may assume it's broken and after a few quick tries stop turning on the switch (at least until it's repaired). As these examples show, behaviors that aren't reinforced every time (calling on the phone) tend to become more stable or permanent. Behaviors that have been consistently reinforced every time may quickly stop being performed when reinforcers are not given (turning on a light).

As we said earlier, you may need to reinforce a behavior every time it occurs while it's being learned. Reinforcing a behavior every time helps the individual learn the behavior more quickly. After the individual learns the behavior (becomes more proficient) reinforcement can be provided less often. For behaviors that are not reinforced every time in the natural environment it's wise to decrease the frequency of reinforcement to more natural rates of reinforcement before instruction ends.

Interval vs. Ratio Schedules

There two general types of schedules of reinforcement. The first type, the *interval* schedule, is based on the amount of time since the last behavior. You might provide a reinforcer every five minutes or every hour. Most of us receive paychecks on an interval schedule. The second type, the *ratio* schedule, is based on the number of behaviors that occur. Reinforcement might be provided after every two, five, or hundred behaviors. Factory workers who are paid on a piece rate basis are paid on a ratio schedule. If a child needs to complete three math problems before getting a tangible reinforcer, this is also a ratio schedule.

Let's consider some examples. Which are interval and which are ratio schedules?

	Interval	**Ratio**
• Ten dishes washed thoroughly.	☐	☐
• Every half hour of piano practice.	☐	☐
• Every five minutes of on-task behavior.	☐	☐
• Five days of having a clean room.	☐	☐
• Three greetings returned	☐	☐
• One hour with no self-injury.	☐	☐

Logically, some behaviors are better suited to interval or ratio schedules of reinforcement because time or count is most important. Later in this module we'll talk about reinforcing an individual for not performing a behavior (for example not hitting for a day or refraining from self-injurious behavior for ten minutes). Obviously in these cases, you must use an interval schedule.

Fixed vs. Variable Schedules

As a second dimension, interval and ratio schedules can both be either *fixed* (always delivering reinforcement after the same amount of time or the same number of behaviors) or *variable* (delivering reinforcement after a non-uniform passage of time or number of behaviors).

Most naturally occurring behaviors are maintained on variable schedules. In our earlier example of the telephone, we saw the reinforcement was variable: you're not sure when you will be reinforced with a conversation. Sometimes it may take ten calls before you get an answer while at others you may get an answer for ten consecutive calls.

In the following examples, which are fixed and which are variable schedules of reinforcement?

	Fixed	**Variable**
• Ten dishes washed thoroughly.	☐	☐
• After every ten widgets are assembled:	☐	☐
• After working for five, then ten, then six, then eight minutes:	☐	☐
• After every half hour with no aggression:	☐	☐
• After three books are read, then after one, and then after two books are read:	☐	☐

Considerations in Selecting a Schedule for Reinforcement

When selecting a schedule for reinforcement it's important to consider how well the person does the behavior. It's also important to think about the type of behavior and the natural schedule of reinforcement.

With the exception of behaviors that are reinforced every time (for example, turning on switches or using a vending machine) reinforcement generally doesn't occur exactly after a certain number of behaviors every time (a fixed schedule), it occurs approximately after a certain number of behaviors (a variable schedule). Variable schedules lead to more stable rates of performance of behaviors and will be more likely to continue longer in the absence of reinforcement.

Step 3: Continued Assessment of Reinforcers

The third step in selecting a reinforcer isn't so much a step as an ongoing process. Once you've considered the above factors, try the reinforcer. Although you've made some good guesses about what might be reinforcing, you might be wrong. Perhaps Ryland doesn't like Coke, or orange juice, or milk. He just chose Coke because he dislikes it least. He might not be at all motivated to work for Coke. When we first use the reinforcer we need to make sure it's working – this is called *initial validation.*

Reinforcers may not remain effective forever. As a reinforcer is being used, continual assessment must take place to assure that it remains effective. Sometimes a reinforcer will wear out. Although Chelsey might really like to play checkers and may be motivated to socialize during a game, she may tire of the game if she plays for several days in a row.

Let's face it – we all get bored. No one item or activity is probably going to continue to be reinforcing indefinitely. If you notice that performance is decreasing, it may be time to use a different item or activity as a reinforcer. If a reinforcer isn't used for a while, it may become effective again. You may run out of ideas for social activities for Chelsey. After a couple of weeks, Chelsey might really want to play checkers again: give it another try.

Activity: Evaluating the Effectiveness of Reinforcements

Use this role play activity to examine some effective and ineffective ways of delivering reinforcement. The class will be divided into groups of two to four and each group will be assigned one of the following scripts to role play. Take ten minutes to practice your role plays before presenting it to the class. A group's member should read the "behaviors to be reinforced" to the class before the group presents their role play. Follow the role plays with a class discussion.

- **Script 1:** Larry is a paraprofessional in a school-to-work program in a local motel. Today, Becky is dusting, straightening, and cleaning rooms. Larry is walking around the room and periodically telling Becky that she's doing a good job. This generally occurs just after Becky has stopped working and is primping (combing her hair, tying her shoes, etc.). Becky begins to go back to work briefly after each encounter and then looks around for Larry to come talk to her. You're demonstrating how badly timed reinforcement can be counterproductive to your training efforts.
- Behaviors to be reinforced:

- **Script 2:** Julie is sitting in a chair in her third grade classroom. Suzie is a staff member. Suzie comes up and tells her, "We'll have some brownies when you finish your work." She says this several different ways and then Julie says "I don't want brownies." You're trying to show that prompting with a potential reinforcer doesn't work and that the attention given may cause a problem which can result in a delay or refusal to do the task.
- Behavior to be reinforced:

- **Script 3:** Jefferson is learning to button his clothing independently. Dewayne frequently gives Jefferson social praise but sometimes he gives a drink of Coke. When Jefferson gets the Coke, he stops buttoning and sits down and drinks it. Jefferson also looks at the Coke more than the buttoning task. You're trying to show the use of an inappropriate reinforcer.
- Behavior to be reinforced:

- **Script 4:** Paul is talking to Gwen but generally isn't looking at her. Gwen is trying to encourage Paul to establish eye contact. Each time Paul looks at Gwen's eyes, Gwen offers a piece of candy. Paul takes the candy but doesn't eat it. Paul doesn't increase the amount of eye contact. You're trying to show that candy isn't a reinforcer for Paul.
- Behavior to be reinforced:

Activity: Evaluating Reinforcements

Using the "Reinforcement Evaluation Form" below, assess how reinforcement is used in the school or organization in which you work. If you aren't presently working, contact a local school or ask a classmate if you can observe his or her classroom. Bring your completed form to share with the class next week.

Person Observed ______________________________

Date ______________________________

Observer ______________________________

- Does the instructor use positive reinforcement?
- If so, what was the "reinforcer"?
- Does it appear to be an effective reinforcer?
- Comment on the size of the reinforcer.
- Comment on the timing of the reinforcer.
- Comment on the schedule of reinforcement.

Section 3

Common Questions About Reinforcement Techniques

You may question the use of reinforcement techniques. Here are answers to some frequent questions which are adapted from Sulzer-Azaroff and Mayer (1986).

Q *How do you balance the use of natural reinforcers with artificial ones?*

A Natural reinforcers are preferred since they will continue to exist after you've completed the program. If you don't think the behavior being taught has any natural reinforcers, you should question whether or not the training has any value. (Although natural reinforcement isn't reviewed here, students may ask this question.) The effectiveness of natural reinforcers can often be increased by controlling the amount of a reinforcer, by carefully controlling when the reinforcer is delivered or my making the natural reinforcer more noticeable.

Sometimes when a task is being learned, it's so hard to accomplish that the effort outweighs the benefit of any naturally occurring reinforcers. During this training time, artificial reinforcers and/or much larger reinforcers may be necessary supplements to natural reinforcers.

Q *Why should people be reinforced for something they should do anyway?*

A We're faced with existing behaviors (or a lack of them) rather than what behaviors should exist. If behaviors occur, we can assume they're being naturally reinforced. If not, we may need to strengthen behaviors and plan for natural reinforcement.

Q *What do you do when other people see an individual receiving reinforcers for something they do without extra reinforcement?*

A All people should have opportunities for attention, desired items, activities of their choosing, and opportunities for success. Although each learner may receive reinforcers for different behaviors they should all have similar opportunities. It may help others understand if you praise them for the success they have achieved in performing some behaviors without extra reinforcement and point out that they have similar opportunities for reinforcement for other behaviors. Differences are minimized by using naturally occurring reinforcers.

Summary

Positive reinforcers are extremely important in creating a positive learning environment for students. To use reinforcers effectively you need to carefully select and monitor the effectiveness of reinforcers while paying close attention to the timing and size of reinforcers. The type of schedule you choose depends on several things, including whether you think an interval or a fixed or variable ratio schedule will work best. Variable schedules are often desirable since they produce more stable rates of behavior.

Questions to Ponder

- What types of things are reinforcing to you personally?
- What steps have you taken to learn a new skill in the past?
- In your experience with young people, what kinds of things have been effective positive reinforcers (i.e., what types of things encourage them to increase their appropriate behavior in the future)? Have you noticed differences in the types of things that have been effective reinforcers for adults?
- Is verbal praise always a positive reinforcer? Why or why not?

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Chapter Three

An Overview of Challenging Behavior

27 **Introduction**

27 **Section 1 The Cost-Benefit Analysis of Changing Behavior**

28 **Section 2 The Three Factor Theory**

37 **Summary**

37 **Questions to Ponder**

Introduction

Individuals who throw temper tantrums, hurt themselves or others, or refuse to cooperate are often described as exhibiting *challenging behaviors*. Sometimes referred to as *maladaptive, aberrant,* or *problem* behavior, challenging behavior often includes such things as aggressive, self-injurious, destructive, and bizarre actions. Challenging behaviors often cause problems for the individual as well as people with whom he or she interacts. When confronted with a challenging behavior, it's natural to want to change the person's behavior. But before we decide to change or stop a challenging behavior, we must examine the causes for the behavior occurring in the first place. This chapter will explore the reasons that people behave in ways we consider challenging. We'll also offer some suggestions on how to create an environment that will minimize challenging behaviors while also developing positive behaviors.

Upon completing this chapter, you should be able to:

- Recognize physiological conditions and demonstrate an ability to minimize their affect on behavior.
- Recognize environmental conditions and demonstrate an ability to minimize their affect on behavior.
- Identify typical functions of challenging behavior.

Section 1

The Cost-Benefit Analysis of Changing Behavior

When we decide to stop someone from doing something, we are restricting that person's ability to choose their own behavior. This shouldn't be done without a lot of thought. Decisions to change a person's challenging behavior need to be made by the team rather than by one individual. The team should know which procedures must be reviewed by the human rights committee or need informed consent. Remember, we don't have a right to make people behave like us just because we have the ability to do so. We need a good reason to change another's behavior. Some good reasons for changing challenging behavior include:

- They're dangerous to others.
- They're dangerous to themselves.
- They destroy property.
- They're a barrier to independence.
- They're a barrier to integration or inclusion.

Before considering restricting or limiting behavior, we should ask ourselves if the benefits of changing a behavior outweigh the costs. This is called a *cost-benefit analysis*. Costs are determined by the effort it takes to change the behavior, and – more importantly – the effects of the change on the person being changed. For example, consider Mary who engages in socially "rude" behaviors during conversations. These behaviors upset people and make it harder for her to have friends. If your approach is to talk to Mary and explain what people think of her behavior and how changing it may help her make and maintain more friends, the costs are low: Mary has listened to some criticism about herself and you've spent a little time with her. The benefits might be visible in terms of better interactions with others and more friends. This would be a good cost-benefit. On the other hand, if the method used to change the behavior is to belittle her in front of other people, the costs will be apparent in terms of decreased self-worth, looking bad in front of others, and damage to your relationship with Mary. The benefits might not be worth the costs.

Before we decide to change a behavior we must determine if there is a good reason to change it and then determine if the benefit of the change is worth the cost.

Section 2

The Three Factor Theory

When working with individuals who exhibit challenging behaviors, it's important to try to find out why the person behaves in a way that we find challenging and what conditions may contribute to the individual's behavior. For example, Jane may have numerous reasons for screaming when her toys are taken away. Maybe she's afraid she won't get the toys back; maybe she knows she'll be removed from the room just before reading starts, thus avoiding an activity she doesn't like.

When exploring the reasons behind challenging behavior, it's important to consider the following three factors:

- The physiological conditions that may cause or affect the behavior (e.g., sickness, medication, hunger).
- The environmental conditions that may cause or affect the behavior (e.g., loud noises, extreme heat or cold, time of day).
- The function the behavior serves (e.g., what the person gets by acting a certain way, the benefit of the behavior).

It's important to consider physiological, environmental, and functional conditions when working with individuals with challenging behaviors. Let's explore each of these in greater detail.

Physiological Conditions

A *physiological condition* is one that involves the one's body or physical state. We might be hungry, thirsty, or tired. We might have a headache, a cold, or arthritis pains; we might have a bad reaction to food or drugs. Each of these may change the way we perceive – and thus react to – the environment. For example, we might enjoy small talk most of the time but hate it when our stomach hurts. We must be aware of physiological conditions as we work to find the causes of challenging behavior.

There are numerous types of physiological conditions that can contribute a person's behavior:

- Hunger or thirst
- Sleeplessness or fatigue
- Physical pains – headaches, arthritis, menstrual cramps
- Stomach problems – gastritis, constipation
- Sinus headaches, hay fever, and allergies
- Mood swings and seizures
- Reactions to food and medication

Physiological conditions may be chronic (long-term) or acute (short-term). Headaches, sinus infections and colds are examples of acute physiological conditions that may affect a person's behavior. When treated for these conditions, their challenging behaviors usually disappear or occur less frequently.

Chronic physiological conditions include such things as allergies, physical illness, and reactions to medications or food. For example, individuals experiencing mental illness often engage in challenging behaviors in response to internal stimuli. They may hear voices, see and feel things that aren't there, or have rapid mood swings. Even seizures can cause changes in mood.

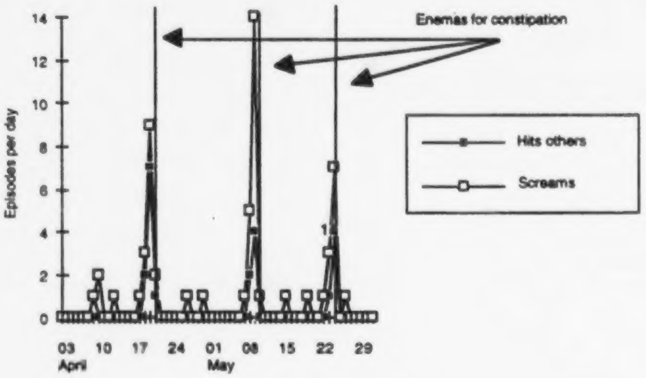
Medications can also cause dramatic changes in behavior. Occasionally, behavioral side effects can result from medications prescribed to control blood pressure, hyperactivity, gastric distress, and other medical needs.

In addition, foods may also have an affect on behavior. We all know someone who gets over-active after drinking a strong cup of coffee – becoming hyperactive, very talkative, and over-sensitive. Other people react to sugar, food dyes, or artificial sweeteners. All of these physiological reactions may have impact on behavior.

Minimizing Physiological Conditions

Step One: Recognizing Physiological Conditions

Once we decide that a physiological condition may be contributing to a challenging behavior, we can use some common sense and the prescribed medical treatments as part of the plan to change the problem behavior. First, we'll want identify the person's physical problems and conditions. Second, we'll want to determine if the problems or conditions regularly come before or at the same time as the problem behavior. For example, we know Sue has a problem with constipation that occurs several times each month. If the times she is constipated coincides with times of increased problem behavior, constipation is probably a physiological condition for increased challenging behavior. Examine the graph below which depicts Sue's behavior during the month.



In the graph, we see three periods in which Sue had many more episodes of hitting others and screaming than on other days. Then we compared these days to the times she was known to be constipated. Note how much the challenging behavior increases right before she received enemas. Let's review the steps in the detective process we covered last week for recognizing physiological setting events.

Step Two: Anticipate and Prevent the Physiological Condition from Occurring

The second step to minimizing physiological conditions and events is to anticipate and prevent them from occurring. For example, if we know Sue has challenging behaviors when she's constipated, part of her behavior plan should be to try to prevent her from becoming constipated. The dietitian, nurse, or doctor may add fiber to her diet, provide preventative medication, or suggest exercise. We may need to encourage her to drink plenty of fluids. Each of these is a preventative step. In the same way, if we know Wendy has a tougher time each spring because of allergies, she might plan more indoor activities during this time and take a medication to prevent the reaction.

Challenging behaviors can also be used to alert a professional or family member to the presence of a physiological condition. For example, Joel is a fifteen year old young man who doesn't communicate his physical problems through verbalization or signs. He's prone to chronic upper-respiratory infections. Several days before the physical signs of the respiratory infection are apparent, he often begins to severely bite his hand. Using this as an indication of a potential problem, staff have sought medical assistance earlier and Joel has avoided pneumonia for the past three years. Prior to this discovery he had four episodes of pneumonia in two years. Being aware of the relationship between a behaviors and physiological conditions can help people with communication difficulties get needed medial treatment.

The same may be true for people with cyclical mood swings. For many people, these mood swings are caused by physiological changes which may happen without the person recognizing that he or she is reacting differently. In these cases, the changes may be obvious to others before they are noticed by the person.

Once we know an individual has a physiological problem, we can notify any appropriate medical professionals and treat it. When Sue gets constipated, she takes a laxative. When Edith gets menstrual cramps, she takes medication. When Wendy has active allergies, she goes to the doctor and gets allergy medication. When Frank gets a mosquito bite (which is a setting event for self-injurious scratching), he puts lotion on it to stop the itching.

Case Study

Let's look at the example of Elmer, a ten year old boy with mental retardation, included in a regular fifth grade classroom. He has a paraprofessional with him one-to-one at all times. Several times per week, Elmer will hit his peers while they're engaging in group activities in the afternoon. Elmer is usually engaged in different activities from his Individual Educational Plan (IEP). He also engages in self-injurious behaviors: he will bite his hand and hit himself in the head. The hand-biting is severe enough to have caused tissue damage. To determine if there are physiological setting events for these behaviors we would first need to determine if he has physical problems or conditions that might be setting events.

First we can review the different types of physical conditions and see if any apply to Elmer. Talking to family members and others close to Elmer can help identify these conditions.

In reviewing these for Elmer, we discover that he doesn't seem to have problems with hunger, thirst, or metabolism. He does have sleepless nights, so this might be a problem. He doesn't have headaches, toothaches, or earaches that we know about. He does have arthritis pains when it's cold or damp. He gets gastritis when he eats fatty foods or tomatoes. He doesn't have allergies or hay fever. He does have mood swings: about once a month he has a period of two to three days when he is more active, talks about strange things, and seems to be less aware of the current activities. This is evident through a change in his affect. As we said before, he has reactions to tomatoes and fatty foods. So we have identified some physical conditions that may be setting events. If after your review of a person, you identify other physical conditions or problems they should also be listed.

The next step in determining if these physical problems or conditions are setting events for the challenging behaviors is to compare the times of the physiological events with the times of the challenging behaviors. For example, we know that Elmer had trouble sleeping on six different nights (in the past few months). Did he have increased challenging behaviors on the following days? If so, this would be a setting event.

In fact, Elmer didn't have any behavior problems on the days following sleepless nights. This suggests that sleep problems aren't a setting event for him. In general, he'll just take a nap when he gets tired. When we examine those days his arthritis bothers him, we again find he doesn't engage in many challenging behaviors on these days. On the other hand, on the days we know he had a stomach ache, he seems to have been much more likely to hit others and engage in self injury. This suggests that the gastritis may be a setting event for the challenging behaviors. In addition, the days he was having his mood cycles were days of increased episodes of self injury and other bizarre behaviors. This suggests that the mood swings constitute a second potential physiological setting event for Elmer.

Environmental Conditions

In the previous section we examined the effects of different physiological conditions on challenging behavior. Here we'll examine how environmental conditions and factors can affect behavior. Environmental conditions include factors associated with the location, an activity, people, schedules, and/or other events.

Location

If we examine where challenging behaviors occur, we often find there are some locations in which the individual is most likely to do the behavior. For example, Fred has few problems with challenging behavior except when he's in the resource room. At first the reason appeared to be the academic work, but several times in the past month there have been social events in the resource room and he still had problems. Thus it appears that something about the resource room is contributing to Fred's behavior. Ask yourself, What's going on in the resource room? Do the fluorescent lights irritate Fred? Is he allergic to the new carpet that was just installed? Being aware of the location of the problem is a good starting point in determining the cause of challenging behaviors.

People and Activities

Let's go back and think about Elmer again. Elmer often hit people in the classroom but almost never on the playground, in the lunchroom, or at assembly. What's going on in the classroom that causes Elmer to hit his classmates? What activities take place when he exhibits his hitting behavior? Does he always hit the same student? Examining the activities and people surrounding Elmer might help to identify an environmental factor that is contributing to his hitting behavior.

Schedule, Time of Day, and Season

Sometimes a change in routine or schedule can cause a person to exhibit a challenging behavior. For example, Susan started shouting and cursing when told she would be having her hearing checked instead of going outside for recess.

Time of day also affects the behavior of certain individuals. For Elmer, all the hitting behaviors occurred after 1:00 but before 3:00 in the afternoon. What's going on for Elmer during this time? Is he tired and therefore irritable? Does he eat a lot of candy at lunch which causes him to be more active? Considering when the behavior occurs can be very useful in determining its cause.

The season may also affect behavior. The excitement of springtime may cause students to be anxious in the classroom; the reduced daylight in winter may make students more moody. The season may also affect the temperature in the classroom. Extreme heat or cold make concentrating on work very difficult. Certain physical conditions such as the flu or allergies are related to what's going on in the environment outside the classroom.

Minimizing Environmental Conditions

The first step in minimizing environmental conditions is to determine if these conditions influence behavior. Once these determinations have been made, the second step is to anticipate the existence of environmental conditions and prepare the individual to deal with them as appropriate – or prevent them altogether.

Step One: Recognizing Environmental Conditions

Earlier exercises asked you to identify environmental conditions that contribute to the occurrence of challenging behavior. The first step in this process was to identify the problem behavior. This is important because it allows us to specify the conditions that occur before and during the behavior.

If we know what conditions or events are likely to set someone off, we can anticipate these situations and take steps to prevent them or minimize their effect. For example, loud noises irritate Fred and cause him to engage in self-injurious behaviors. If he's considering going to a concert or wrestling match, we might suggest that he wear earplugs or rethink his decision to go. Bridget gets upset when she is exposed to yelling and screaming by her classmates. When Joyce begins yelling near Bridget, we might ask Joyce to leave the area.

In addition, we can use this information to think ahead about future activities and anticipate conditions that might influence behavior negatively. We should also be alert for unplanned events and be prepared to respond to them if necessary. Knowing what events and conditions serve as precursors to challenging behavior allows us to be better prepared to deal with those behaviors. This also helps us to take preventative measures to minimize the effects of potential environmental conditions.

Step Two: Anticipating and Preventing Environmental Conditions

One preventative measure we might take would be to prepare the individual for upcoming events. For example, changes in schedules and scheduled activities might trouble Bryce and cause him to scream. When faced with a change to his normal schedule, Bryce can become very stubborn and shout that the change is wrong. Staff have found that telling Bryce about the change in advance and having him tell someone else eases the problem. This is one example of preparing the individual for an upcoming environmental condition.

Another example might be discussing the potential problem with the individual and suggesting that he or she avoid the environmental condition. Martha dates Fred occasionally and would like to be his steady girlfriend. He prefers, however, to date several girls. Martha becomes upset and cries when she sees Fred with other girls at the high school. She sometimes becomes physically aggressive when she sees him with Sally or Freida. Martha has been invited to a party that Fred, Sally, and Freida will attend. You might suggest to Martha that she avoid the problem by going to a movie or that she should leave if she starts to get upset.

One of the best ways to detect oncoming challenging behavior is to recognize the antecedent behaviors that indicate the onset of a challenging behavior. For example, Martha generally gets depressed and mumbles about "no good, two-timing boyfriends" and "those girls" before she gets angry enough to begin striking out. If you can talk to her and redirect her to another topic or location while she is still mumbling, she generally doesn't get physically aggressive. Albert doesn't tolerate loud and confusing environments very well and will often beat his head when confronted with this type of situation. He often starts moaning before be hits his head. The moaning is an antecedent behavior.

It's important to be alert and intervene quickly when you notice an environmental condition starting to have its effect. If you act when Martha first starts mumbling or Albert first starts moaning, it's easier for them to redirect their attention.

Functions of Challenging Behavior

After physiological and environmental conditions have been ruled out as explanations for challenging behavior, we must try to discover what "function" that behavior is serving for the individual. What does the person achieve or benefit from performing the behavior? How do others respond to the individual when he or she behaves in a particular way?

The following examples illustrate some common functions that challenging behavior serves:

- **Obtaining Something:** A child in the grocery store throws a tantrum to get a preferred food item. When a parent gives the child the item to "quiet her" the behavior has proven functional. The child has learned an effective way to get what she wants.
- **Keeping an Object:** When you take the pacifier away from a child he may scream and pound his feet on the floor. If you give the pacifier back, the screaming becomes a functional behavior.
- **Gaining Access to an Activity:** When Charles isn't allowed to keep his teddy bear with him during class at the elementary school, he begs and threatens his teacher and paraprofessional. If they allow him to keep the bear with him, the begging and threatening are functional behaviors. He gets to keep his toy because of his challenging behavior.
- **Self-Stimulation:** Jay may turn around in circles because he likes to feel dizzy. Rhoda may flip her fingers in front of her eyes because she likes the way it looks and feels. Susan pokes the side of her head because she has an earache.
- **Avoiding a Task:** Carol throws school materials when faced with a nonpreferred task. The task is removed so she won't throw the test materials. Next time she doesn't like a task she may throw things so she doesn't have to do the task.

Typical Functions of Problem Behaviors

Antecedent Behavior	Possible Functions
Nonpreferred task	*Avoid task*
Frustrating task	*Assistance with task*
Demanding instruction	*Escape instructions*
Not enough attention	*Get attention*
Someone else gets attention	*Get attention*
Stops paying attention	*Get attention*
Preferred person busy	*Get attention*
Wants something	*Get something*
Changes in routine	*Object to changes*

Activity: Functions of Behaviors

Let's look at some examples of antecedents and behaviors and you list the possible functions of the behaviors. The functions are the reasons the person does the behavior. What are the probable functions of these individuals' behaviors in the following cases?

- John doesn't like assembly requiring fine motor skills. When asked to do tasks requiring fine motor skills he often screams.
- Gilbert enjoys doing assembly tasks requiring fine motor skills and enjoys almost any job once he's learned to do it well. He often bites his hand when a new job begins.
- Mary Alice starts screaming because she hears voices of people who aren't there.
- Janice bites her hand because she has a subclinical seizure.
- Frank doesn't like to start work but does well once he's started. When asked in a stern and demanding tone to start work, he'll often throw something and stalk off.
- Mary will work steadily at her microfilming job for hours at a time if someone stops by and checks in with her several times an hour. When no one comes by for an hour or so she often wanders away from the job.

The next examples involve frequently heard comments. For example, "It's not good to praise Charles because every time you do he stops working, and when you leave he bangs the table." What probable function does banging the table serve? Answer: He may be asking you to stay with him.

- "It's not good to let Annie have her radio at break because she always throws a tantrum when you have to take it away."

- "Follow the schedule exactly with Alex. Whenever anything doesn't happen on time he gets very upset".

Summary

This chapter has examined some steps in doing the detective work to figure out why someone engages in challenging behaviors. The process begins by identifying the challenging behavior and doing a "cost-benefit" analysis to determine if the behavior should be changed. Sometimes behaviors can be changed by addressing the physiological or environmental conditions that influence them. Other times, the reason for a challenging behavior can be found in the function it serves for the person. It's important to know how often and under what circumstances the behavior occurs so we can assess the function the behavior serves for the person. Once this has been done the next step is to determine how to go about teaching alternatives that the individual can use to achieve what he or she needs using more appropriate behaviors. The next chapter discusses this topic in further detail.

Questions to Ponder

- Think about your own work environment: what types of environmental conditions exist there that sometimes affect your own behavior? What have you done to help minimize those conditions?
- Think about a challenging behavior that is often exhibited by someone close to you (student, child, spouse, relative). What function do you think the behavior serves for the person?
- Think about some of the reasons people have challenging behaviors: do you think these reasons cause you to have challenging behaviors too?
- The next time you're confronted with a behavior you consider to be challenging, what steps will you take to deal with it?

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Chapter Four

Alternatives to Challenging Behaviors

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39 **Section 1 Putting it in Practice**
50 **Section 2 Overcoming Avoidance**
56 **Summary**
57 **Questions to Ponder**

Introduction

As we've discussed, most challenging behaviors serve a definite function for the individual. In many cases, these behaviors have proven to be an effective means by which the individual can get what he or she wants. Challenging behaviors are often very difficult to change when: 1) they're more effective than the alternative behavior, 2) they have a long history, and 3) the natural response of the environment to the behavior is reinforcing to the person (e.g., someone who greets he sees because he likes when people verbally respond to him). When the above factors exist, our programs will need to not only treat physiological conditions, minimize the effects of environmental conditions, and teach alternative behaviors, but will also need to manage specific reinforcement (or consequences) of the challenging behavior.

Upon completing this chapter, you will be able to:

- Demonstrate an understanding of how to pin-point challenging behaviors.
- Identify strategies for teaching alternative behaviors.
- Demonstrate an understanding of managing reinforcements.

Section 1

Putting it in Practice

Pinpointing the Behavior

The first step in teaching alternative behaviors is to is to pinpoint (or define) the challenging behavior you wish to change. Pinpointing is the process of selecting a behavior to reinforce. It's important to carefully select the behavior to identify its functions as well as to monitor success in decreasing it.

Let's look at some examples: which of the following are behaviors? Keep in mind that a behavior must be both observable and measurable.

Is it a behavior?	**Yes**	**No**
• John hits Sue.	☐	☐
• Mary is angry at Jeff.	☐	☐
• Fred is mad.	☐	☐
• Alice scratches her leg.	☐	☐
• Freida throws a tantrum.	☐	☐

Activity: Pin-pointing Challenging Behaviors

The twenty words or phrases listed below may or may not be specific behaviors. If the behavior is both measurable and observable behavior check "Yes", if not, check "No", and list a possible specific behavior in the right column. Do the first ten as a practice exercise; the second ten will be done as an individual activity.

Part 1

	Behavior	*Specific?* Y	N	Example
1	Hits peers	☐	☐	______
2	Is aggressive	☐	☐	______
3	Is depressed	☐	☐	______
4	Throws books	☐	☐	______
5	Bangs head	☐	☐	______
6	Makes sexual advances	☐	☐	______
7	Hallucinates	☐	☐	______
8	Kicks others	☐	☐	______
9	Shows aggression	☐	☐	______
10	Is sneaky	☐	☐	______

Part 2

	Behavior	*Specific?* Y	N	Example
11	Threatens coworkers	☐	☐	______
12	Is self-injurious	☐	☐	______
13	Slaps self in face	☐	☐	______
14	Attacks others	☐	☐	______
15	Bites wrist	☐	☐	______
16	Is upset	☐	☐	______
17	Touches breasts	☐	☐	______
18	Yells at others	☐	☐	______
19	Has fits	☐	☐	______
20	Sets off others	☐	☐	______

Determining the Function of the Behavior

Understanding the function of the behavior is crucial to the process of changing challenging behaviors. Sometimes this process is as easy as asking the individual what he or she needs or wants at the time the challenging behavior occurs. When individuals are unwilling or unable to share their reasons for behaving in challenging ways, we must make educated guesses as to the function of the behavior. When determining the function of behaviors ask yourself the following questions:

- Is the person's behavior a result of a physiological condition?
- Is the person's behavior a result of an environmental condition?
- Is the person trying to obtain something?
- Is the person trying to keep an object?
- Is the person trying to gain access to an activity?
- Is the person engaged in self-stimulation?
- Is the person trying to avoid a task?

Selecting Alternative Behaviors

Once the function of the challenging behavior has been determined, the next step in teaching alternative behaviors is the selection of the alternative behavior(s). For John, who doesn't want to do certain types of assembly work, some appropriate alternatives might be to:

- Say he doesn't want to do this job.
- Suggest improvements in the job that would make it better: "I don't like to do this because my chair is too low."
- Suggest a preferred job that might be available.
- Negotiate a settlement: "I will do this now if I can work on a preferred job later."

Finding alternative behaviors may take more than one attempt. Your search will be more successful if you keep these factors in mind:

- **Choose behaviors that are easy to do.** The first thing to look for is a behavior the person can do or can easily learn to do. If the alternative behavior is too hard, the individual will generally just do what worked before. This is a key concept for successfully teaching alternative behaviors. "Too hard" can mean different things. If the person doesn't do the "right" thing at the right time, additional learning is needed. Making sure the person can do the behavior at the right time is essential to this behavior change approach.

  In the example above, John doesn't want to do certain types of assembly work. If he has good verbal skills, he may be able to verbally state that he doesn't want to do the job and that he'd prefer to do a different assembly job. Staff should review with John the possible alternatives and when they can be used. As much as possible, this should be done in the natural setting (in this case, at work) where the actual interaction will most likely take place. A role play of the situation to provide John some practice in using alternatives should also be done to get an accurate idea about whether or not John will be able to use the alternatives. However, until you see John successfully use the alternatives in the natural setting when faced with a type of assembly work he doesn't like to do, you can't be certain John can actually perform the behavior.

- **Choose behaviors that are "functional".** The second important aspect is that the behavior must be functional. To be functional, the alternative must be accepted by others and work for the individual. To work means people will respond to the alternative behavior to meet the person's needs.

  It often helps to review the possible or probable scenarios with others prior to situations in which John is likely to use the skills you have taught him. Otherwise, they may be unaware of the options John may ask for, and will be less likely to respond in a consistent manner. If John doesn't get what he wants by verbally requesting it, he may resort to the behavior he already knows will work: hitting others, throwing work materials, or some other behavior which has been successful in getting him what he wants. Remember – you need to "sell" John the idea that he should use "new and improved behaviors."

- **Choose behaviors that are acceptable.** The third factor to consider is how well will the behavior be accepted. Accepted refers to the community. It refers to people other than those people who are part of the team. We have discussed the importance of learning behaviors that will work for the person in the course of his or her normal daily schedule and community interactions.

These three factors – ease of the behavior, its functionality, and acceptance – are listed in priority order. If the behavior can't be easily done, the others don't matter. The ideal behavior will meet all three criteria.

Teaching the New Behavior

Now that you've selected alternative behaviors, the next step is to get the person to use the alternative behaviors in place of the problem ones. The first step is to review the functional assessment and determine the conditions during which the challenging behavior is most likely to occur. The best time to teach the alternative behavior is when the behavior is needed, which includes the times, places, and conditions in which the challenging behavior is used now. Thus, by determining the conditions that lead to the problem behavior, we can identify when this will be. In addition, we want the individual to use the alternative behavior instead of the problem one, not after it. If we can anticipate the problem behavior, we can prompt alternative behaviors in these situations.

One way to anticipate the occurrence of a challenging behavior is to identify antecedent behaviors. As we reviewed earlier in this session, an antecedent behavior happens before the problem behavior. Consider some more examples:

- When faced with fine motor assembly tasks John generally mutters about how he hates it. If nothing changes, after a few moments he'll start to scream.

- When faced with a new job, Gilbert will generally try to do it. When he has trouble he gets frustrated and will start to work faster and faster. This generally hasn't worked and so he starts to bite his hand.
- When Mary Alice starts hearing voices she'll look around and then put her hands over her ears. After several moments of this she'll start to scream.

These antecedent behaviors can become signals for prompting the alternative behaviors. There are three things we might do when the individual does the antecedent behaviors. First, we might ease the situational demands, if those are part of the problem. Second, we also might redirect the person away from the setting events. The antecedent behaviors should be our signal that we need to do these things now. The third step is to prompt the alternative response. The antecedent behavior is a signal that this is the time the alternative behavior is needed. There are several methods for teaching the alternative behaviors.

In teaching the alternative behavior we'll use all of the teaching skills we have learned. Differential reinforcement, shaping, and communication strategies should all be used to teach the alternative behaviors. The first thing is to make sure the person knows how to do the behavior. Remember one of the criteria we used to select the alternative behavior was that it be a behavior the person can already do or can easily learn. In selecting our strategy to teach the alternative behavior, it's important to decide when to teach the behavior. It's easier to learn this behavior when not faced with a situation that normally results in problem behavior. Such situations are often stressful for the individual. If we are going to teach Gilbert to ask for help (verbally or by turning on a light on his work station), it will be easier to practice before he is upset. This might be done by giving him a difficult task and having him turn the light on as we prompt him. If he communicates verbally, we might try to role play the situation with him. This means we should practice before situations occur and practice again once the person is calm afterwards.

In addition to these, we'll also watch for the antecedent behaviors and prompt the alternative when this happens. This may mean that we allow the person to stop working at times he or she is scheduled to work. It may mean we allow people to have things at times or in quantities we would normally find inappropriate. This is necessary at first, so the person can learn that the alternative behaviors work.

Possibly the most important part of the methods for teaching the alternative behaviors is to make sure they work. Gilbert may have asked for help in the past. Frank may have requested more positive interactions. Charles may have asked for attention. But the way this was done was not successful. If the alternative behavior doesn't serve its intended function, there's no reason for the individual to continue to do it.

The final topic in teaching alternative behaviors is the response to the problem behavior. We have already discussed some crisis management techniques. The first thing we must ensure is that no one gets hurt. If the individual is engaging in self injury or becoming aggressive, we need to block and protect the person and other people and then the environment. If the individual is going to hurt himself or someone else we must step in and prevent this. Unless otherwise specified by the behavior program this is always the first priority.

Once people are safe, the next response to the challenging behavior should be similar to the response to the antecedent behaviors. Back off a little, redirect the person away from the situation, and prompt an alternative behavior. There are times to take a more direct approach as we have previously discussed; again, the way you handle crisis situations is often a matter of school and agency policy, and your employer should provide you with information and training on handling these situations.

Managing Reinforcements

Three strategies for managing reinforcement can be helpful when working with individuals who are learning alternatives to their challenging behavior. These include:

- Limiting reinforcement for challenging behaviors.
- Adding reinforcement for positive behaviors.
- Using differential reinforcement to reinforce positive behaviors while ignoring challenging ones.

Let's explore each strategy in further detail.

Limiting Reinforcement

Reducing Attention: The first method to limit reinforcement is to reduce the social reinforcers (attention) received for a challenging behavior. If a primary function of the behavior is to get attention, we may need to control that attention. For example, we may need to ask visitors to only interact with Joe on breaks from work. But when Joe starts interactions at appropriate times and through appropriate ways, it's important to give him attention. In this way the appropriate alternatives work and are functional.

Sometimes it's hard to ignore some behaviors because they may be self-injurious and aggressive. In this case, it may be necessary to block Jane's head hitting without giving her attention, withholding it until times when she engages in desired behaviors like making eye contact and starting a conversation.

Another way to control social reinforcers is to get peers or people in other settings to cooperate with our efforts. For example, if Marta talks out in class to get attention from her classmates, getting them to ignore the behavior can be very effective.

Controlling Tangible Rewards: If the natural reinforcement is tangible, we may need to control tangible reinforcers by making sure the challenging behavior isn't rewarded. For example, if Bill hits Jill to get the radio back, it may be important that he not get the radio following the hit: he can get it back later through appropriate alternative behaviors. If David threatens to run away if he doesn't get a doughnut, how might we limit tangible reinforcers for this problem behavior?

Removing People from Reinforcers: The last method for limiting reinforcement is to remove the person from the reinforcer. If social attention or social reactions are the consequences that reinforce the problem behavior, we may need to remove the chance of attention from the teaching environment. This may mean separating two individuals who can't get along or removing the person from a social environment as a consequence of the challenging behavior.

If, for example, we determine that Mary stops working on her lessons to impress certain people, we might require her to go work by herself when she begins flirting. This would remove the chance that someone will give her the attention she seeks.

Remember that doing something like having Mary leave her work area is a restrictive procedure and – depending on the decisions of the interdisciplinary team, the type of procedure, and the way it's implemented – it might constitute a regulated or controlled procedure under Minnesota law. Removing the person from a reinforcing environment becomes a form of time out. Any program of this type would only be implemented in combination with a program to teach and reinforce alternative behaviors.

Activity: Limiting Reinforcement

Let's practice the methods for limiting reinforcement. In the following examples, provide the naturally occurring reinforcer for the challenging behavior and how we could limit reinforcement in each case.

- For half of his school day, Ed works at a local bank sorting mail. When he runs out of mail, he bangs his hand on the table. The selected alternative behavior is getting more mail on his own. He'll do this after a few minutes of hand banging.

  Reinforcer: ______________________________

  Limits: ______________________________

- Esther, a seven year old girl with severe physical and mental disabilities, eats her lunch with the other kids at her school. Jennie, one of the older children, has befriended Esther and they really enjoy eating and interacting together. When Jennie spends time with other people in the cafeteria, Esther moans, cries, and makes loud vocalizations. Jennie will usually go over and calm her down. The selected alternative behavior is using appropriate social interaction behaviors.

Reinforcer: ________________________________

Limits: ________________________________

Adding Reinforcers

The second strategy for managing reinforcement involves the use of added reinforcers. Naturally occurring reinforcers typically don't occur often enough or are too hard to control, in which case we may want to add extra reinforcement to the environment.

The normal rate of reinforcement in the "real world" is pretty low. Look at our typical work environment: we're not often told we're doing a good job and are paid only so often – and what we get paid usually isn't as much as we'd like. It's easy to see why a lack of consistent positive reinforcement is one of the primary reasons some people don't do well with normal reinforcement.

In our first session, we learned how providing feedback on what is and isn't correct is a very important function of reinforcement. For this and other reasons, we often add extra reinforcement to our teaching environments, which helps people learn alternatives to challenging behaviors.

These added reinforcers may be easier to control than the natural reinforcers and may be strong enough to overcome the reinforcement that the individual is receiving naturally. One way to do this is to use differential reinforcement – reinforcing positive behaviors while ignoring inappropriate ones. We briefly discussed this strategy in Chapter Two; now let's examine it in detail.

Differential Reinforcement

Earlier, we discussed how consequences control most behavior. Many of the objectives developed through the planning process involve increasing or strengthening behaviors that are currently performed inconsistently. When an individual knows how to do something and does it at least occasionally, simply reinforcing the desired behavior may encourage the individual to use it consistently. For example, if Judy is often late coming back from break but is sometimes on time, reinforcing coming back on time should increase that behavior. This in turn, will decrease how often she comes back late. Reinforcing a desired behavior while ignoring an undesired one is called *differential reinforcement.*

Differential reinforcement is the heart of positive programming. This is one of the most desirable approaches to strengthen appropriate behaviors while decreasing undesirable behaviors at the same time. Differential reinforcement can be a very effective way to provide feedback and to motivate individuals to perform desired behaviors.

Consider the following example: Mary talks out in class to get attention from her classmates. We could pay special attention to her – or, better yet, having classmates give her attention – when she doesn't talk out as a form of differential reinforcement. In either case, she receives more attention than normal for not engaging in her talking out behavior. To effectively use this technique, the following three guidelines should be kept in mind.

Guidelines for Using Differential Reinforcement

There are three main things to do when using differential reinforcement:

- **Maintain prompting and criticism at the lowest level.** Differential reinforcement works because it's reinforcing. Prompts and negative comments reduce some of this effect. There is no need to prompt Alice to comb her hair or straighten up her clothes when we are reinforcing her.
- **Make reinforcement attainable.** Differential reinforcement works because appropriate behavior is reinforced while inappropriate behavior isn't. It's important for reinforcement to occur frequently to speed the learning process. For this reason, set the criteria for reinforcement at a level the individual can reach without too much difficulty. When Alice is going to a school dance, she always looks clean, her hair is done up, and her clothes look nice. Yet on some school days, her hair may be combed but her clothes are disheveled. In working with Alice you noticed that she is more likely to comb her hair than to wear nice clothes. Start with wearing nice clothes, and add the other behaviors one at a time. You don't need to require perfection – you're looking for improvement. Many times differential reinforcement fails because too much is required too soon and reinforcement doesn't occur often enough.
- **Increase criteria for reinforcement at a pace allowing reinforcement to remain attainable.** For example, as Alice begins to dress more conscientiously each day, the requirements for reinforcement might be increased; she was receiving reinforcement if she wore clothes without any holes in them, and now she must wear clothes that are wrinkle-free and don't have holes in them. If this is successful, you could increase the criterion again, and reinforce Alice for wearing wrinkle-free clothes with no holes and combing her hair before she comes to class.

  When changing the criteria for differential reinforcement for Alice we added more behaviors to the criteria for reinforcement. Instead of adding more behaviors differential reinforcement can be used to motivate a person to do a behavior better, faster, or more often.

Consider some examples where differential reinforcement is used in these ways.

Let's go back and find out what happened with Fred. After leaving the institution and coming to work, Fred began to yell and throw objects when he didn't want to do an assigned task. His supervisor taught him more appropriate alternative behaviors, but Fred still screamed when he thought he was treated unfairly. Fred's challenging behavior is yelling and throwing objects which is reinforced by avoiding nonpreferred tasks. There are several different approaches that could be taken to help Fred reduce this behavior.

A method for controlling the natural reinforcer might be to not let him avoid the task when he yells or throws things. A method for differentially reinforcing other behaviors would be to praise Fred every hour he goes without yelling or throwing things. A method for differentially reinforcing an alternative behavior would be to give him a different job when he asked for it but not when he gets upset. A method for removing him from a reinforcing environment would be to not challenge him with any tasks he doesn't want to do. This means he wouldn't use the challenging behavior and so it wouldn't be reinforced. Another would be to only request him to do nonpreferred jobs when a supervisor is present who doesn't let him avoid the task. This would remove him from a situation in which the behavior will work.

Activity: Selecting a Method for Managing Reinforcement

In this small group activity, which should take about 40 minutes, you will have two examples of situations with an challenging behavior. You will need to identify the targeted problem behavior, the function it serves, and the reinforcer for the behavior. Then you will need to describe a method for controlling the natural reinforcer, for differentially reinforcing other or alternative behaviors, and for removing the person from the reinforcing environment. Once these have been identified, your group should discuss the three different solutions and select one or more you think will be the best choice, and describe why you made this decision.

- **Problem 1:** Alice works in an elementary classroom on a reading activity. She sits across the work area from her friend, Marvin. When he talks to other children, she gets mad, quits working, and will often throw her materials at him and/or the other children. When this happens, Marvin generally looks at her and goes back to work.

  Problem behavior:

  Function of problem behavior:

  Reinforcer for problem behavior:

Method for managing natural reinforcement:

Method for using differential reinforcement:

- **Problem 2:** Felicia is a soft-spoken woman who can independently shop for groceries. She likes to have help selecting the right cut of meat and will stand at the meat counter and wait for someone to notice her. If they do, she'll ask for help, telling them what she wants to cook. If no one approaches her, she'll rap on the counter with her cane. She's already broken one pane of glass by doing this. When someone approaches after she raps, she'll say, "I want some damn service now," and tell them what she wants.

Problem behavior:

Function of problem behavior:

Reinforcer for problem behavior:

Method for managing natural reinforcement:

Method for using differential reinforcement:

Method for removal from reinforcing environment:

- **Problem 3:** When Monica needs to use the restroom, she'll throw her school materials and bite her arm. When staff see this, they ask her what she wants and she signs "toilet". They escort her to the restroom.

Problem behavior:

Function of problem behavior:

Reinforcer for problem behavior:

Method for managing natural reinforcement:

Method for using differential reinforcement:

Method for removal from reinforcing environment: T

Section 2

Overcoming Avoidance

The previous section looked at ways to change naturally occurring positive reinforcement. The function of many challenging behaviors is to avoid doing something or to escape from a task or situation. For some individuals, avoiding work, social interactions, or basic self-care responsibilities may be a significant barrier to independence and integration. It may also be that avoiding these is so strong that reinforcing alternative ways to do these behaviors isn't sufficient to overcome this tendency. In these cases it may be necessary to take special steps just to overcome this avoidance.

Behaviors that are maintained by negative reinforcement can be extremely difficult to change. These behaviors are usually difficult to ignore, and it's often easier to let the person avoid the activity or demand than it's to ignore the behavior. Some staff may be consistent in providing alternatives and getting the person engaged in desirable activities. If the behavior has been used many times in the past, the individual may try the avoidance behavior with different people. If even some people allow him or her to avoid the task, this will reinforce the behavior on a variable schedule. Behavior maintained by reinforcement on variable schedules is even harder to change than behavior maintained on a frequent or fixed schedule. Thus, the natural tendency is to let someone avoid a task – and if avoidance occurs at least some of the time, the motivation to avoid remains strong. For these reasons, it often takes special efforts to overcome avoidance.

We'll look at three strategies to overcome avoidance. The first strategy is to make teaching decisions based on long-term progress instead of short-term issues. Sometimes short-term decisions may seem counter-productive unless considered in a longer perspective. We'll discuss each of these strategies in more detail after reviewing the list of strategies. The second strategy is to make the avoided situation more reinforcing so the person will want to do it. The third strategy is similar to the second. We need to make the avoided tasks more reinforcing.

Base Teaching Decisions on Long-Term Progress

The first strategy addresses the moment to moment decisions we make to handle situations. These decisions should be based on the individual's long-range goals, and the primary objective of programs to overcome avoidance should be to reinforce non-avoidance behavior. In other words, we want to reinforce the person for being in the nonpreferred environment or doing the non-preferred task. The first idea is to focus on one thing at a time: select the most important objective and reinforce that without withholding reinforcement because of failure to meet a second objective. For example, David doesn't like to go the vocational work room; he actively fights people who try to get him to go there. Once in the work room he sometimes hits and kicks to leave. Other times he may go to the work room and really enjoy the work he learns in vocational class.

In this example there are three different behaviors that could be reinforced:

- David will go to work area.
- David will stay in work area.
- David will work steadily.

David generally doesn't want to do any of these things: he wants to go someplace else. What do we do? If we focus on one thing at a time, the first objective might be to get him to go to the work area when requested. We might give him a Coke when he gets there to reinforce this. We might suggest he go to the work area and, if he complies, reinforce him enthusiastically when he arrives. If he wants to leave, however, we should let him. Some people might suggest that allowing him to leave the work area and not making him do the work is wrong. But our one objective is to go to work. Once he goes to work regularly we can start requiring a short stay and build this into longer and longer work time. In this way we may get him working steadily for most of the day without ever fighting him to do it. In the end he may want to work.

Make Things Easy

The second idea is to make things easy. In many cases avoidance is linked to frustration with the task, low reinforcement rates in the avoided environment, or infrequent reinforcement for the avoided task. It's critical to set achievable expectations for people. When the individual does challenging behavior to escape the task or activity, it's important to set criteria for the alternative behaviors that are easy to meet. In David's case all we required was a single simple response. This increases the chance of reinforcement. The more reinforcement he receives for the alternative behavior the more he'll want to do it.

Relax Requirements for Old Behaviors

The third strategy involves relaxing the requirements for old behaviors when new ones are started. For example, when we're first getting David to come to work we might reinforce him – by giving him a cup of coffee – anytime he shows up at work. Later we might reinforce him when comes to work only when he's on time. After he's regularly on time we might start requiring him to sit at the work table for a couple of minutes before he gets his coffee. During this phase it would be okay to reinforce him for sitting at the table even if he was a few minutes late. This approach is similar to the rules for shaping and for minimizing the effects of setting events.

Making Environments Reinforcing

A second aspect of the overall program strategy is to make the avoided environment or task as reinforcing as possible. The first idea involves increasing the available reinforcement in the avoided environment and for the avoided task. For example, with David we increased the reinforcing value of the environment by moving his morning coffee into the work environment. Increasing the reinforcement value of an environment may be done in other ways.

The second idea for increasing the reinforcing value of the environment is to decrease the reinforcing value of competing environments. When David wants to leave the work area, it's partially because he doesn't want to be there and partially because he wants to be somewhere else. We increase his desire to be at work by increasing reinforcers (e.g., putting his morning coffee at work) and we can decrease his desire to be in other places by not having coffee available anywhere else.

The third strategy to overcome avoidance is to decrease the punishing aspects of the avoided environment. This can be done by presenting demands in non-threatening ways and decreasing the frustrating parts of the task or environment. Often when an individual is avoiding a situation, it becomes a power struggle between the individual and the staff person trying to get the individual to do something. In these cases the individual may simply be trying to exert control over her life. When someone asks her to do something in a loud, strong, or forceful tone of voice, she may simply react against the control. The first part of a positive approach to overcoming avoidance is to give control back to the individual and set the environment up in such a way that the person will want to respond. For example with David, we ask him if he wants to go to work and reinforce him for going instead of making him go. This increases his control over the situation and hopefully his motivation to attend.

The second idea is to decrease the punishing characteristics of the avoided environment by decreasing task frustration. If the task is difficult, it's probably not reinforcing. When someone tries to avoid a hard task they may be telling you it's frustrating. Try simplifying the task. For example, we would only ask David to go to the work area at first.

The third idea is to remove annoying stimuli. If the chair is too high or low or too hard or soft, it can make the task more punishing. If someone sits across or next to the individual and bothers him, he won't like the activity as much. If the room is too hot or cold or the sunshine is in his face he may not want to do it.

Now let's look at some programs to overcome avoidance responses. This small group activity is like the first one. Each group has an example and your task is to address each of the issues we just discussed. David leaves the area after a short while.

Small Group Activity: Programs to Decrease Avoidance Responses

Directions

In this small group activity we'll be looking at strategies for decreasing avoidance responses. Each group will have several problems to address. First identify the challenging behavior and an alternative behavior. Develop a task analysis of the alternative behavior. Discuss a reasonable step in this task analysis as the focus of your initial efforts. Suggest ways to increase reinforcement and decrease punishment for the alternative behavior. Select a second step in your task analysis. One team member should be prepared to report to the class.

- **Problem 1:** Willy is very noncompliant about brushing his teeth. Every time someone tries to brush his teeth, he'll hit, kick, and try to bite the person doing it. Staff generally back off and about once a week three or four people hold him down to brush his teeth. He may lose teeth soon because of neglect. This is a controlled or regulated procedure, and the team would prefer to use a positive approach.

  Problem Behavior:

  Alternative Behavior:

  Task analysis of alternative behavior goals:

  Select an alternative behavior to focus on:

  How can you increase reinforcement for doing the alternative behavior?

  How can you decrease punishment for alternative behavior?

  Once the first alternative behavior is mastered, what will you do next?

- **Problem 2:** Freida works in a community vocational program. Some days her job is to package pet food kits. Freida seems to enjoy this and works most of the time. Other days her job is to inspect cans of pet food for dents. On these days her production rate is very low, she often sleeps, and if pushed, will throw cans. She needs to inspect cans at least one day every two weeks.

Problem Behavior:

Alternative Behavior:

Task analysis of alternative behavior goals:

Select an alternative behavior to focus on:

How can you increase reinforcement for doing alternative behavior

How can you decrease punishment for alternative behavior?

Once the first alternative behavior is mastered, what will you do next

- **Problem 3:** Betty refuses to go to group activities in the game room of the apartment complex at night. Her psychiatrist believes that her withdrawal leads to increased psychosis and may result in hospitalization. She enjoys some craft projects but when pressed to do them shuts herself out and doesn't listen. She enjoys going out to eat with one particular person but this probably can't happen often enough to meet her goal for socialization.

Problem Behavior:

Alternative Behavior:

Task analysis of alternative behavior goals:

Select an alternative behavior to focus on:

How can you increase reinforcement for the alternative behavior?

How can you decrease punishment for alternative behavior?

Once the first alternative behavior is mastered, what will you do next?

Differential reinforcement depends on the individual already knowing how and when to do the behavior. One way to find out if the learner knows how and when to do the behavior is to offer a huge reinforcer for the behavior. If the individual does the behavior correctly you know that the behavior doesn't have to be taught. The individual just needs to become more motivated. Individuals may not be doing the behavior regularly because it's too hard or because it's more reinforcing to not do the behavior. Let's look at two examples:

- John is learning to drill holes in aluminum plates as part of his job training for when he graduates from school. He often produces at 35% of a typical rate but at other times produces less than 20% on the same job.
- On some days Alice comes to school looking neat and well-dressed, while other days her hair is uncombed, her clothes have holes, and she smells like she hasn't bathed in a while.

In both these cases, providing reinforcement for the instances of desired behavior will help strengthen those behaviors.

Behavior Contracts for Alternative Behaviors

"Good behavior" contracts are made with individuals to accomplish positive behaviors while not engaging in challenging behaviors. This short look at contracts won't prepare you to develop contracts because there are many other things to consider. Contracts can be a powerful tool for behavior change, but are easy to use incorrectly. The purpose of including a discussion of contracts here is to introduce the topic and a few of the key concepts.

The first important aspect of a contract is selecting the behaviors and reinforcers. These need to be negotiated between the individual and person managing the contract. This should be treated much as in a work contract: that is, if the individuals does these things he or she will be paid a given amount. It's important that the behaviors be something the person can reasonably accomplish and that the "pay" be something that can fade to a natural consequence. For example, when the positive behaviors are selected, they should be something the person has demonstrated the ability to accomplish.

John, for example, is able to clean his work area in Home Economics, but almost never does so. To set the criteria for cleaning the work area every day for a month sets him up for failure. A better way to handle it might be to set the contingency at three days a week for a while, and then to increase this to five days a week, and then to six as he begins to do his homework more regularly.

If Rachel has an average of ten tantrums a week, asking her to go for a month without a tantrum is unreasonable. In fact, having none for a week isn't likely to occur. The contact might be to have fewer than three instances in a week. The payoffs should also be reasonable. By making the behavioral contingencies reasonable, you improve the chance of success. In addition, the reinforcement should be one that the individual could reasonably set for herself and might fade to a self-reinforcement program. In this case you might set the reinforcer as a trip out to eat if the person has a good day, week, or month. This would be something she might do for herself later.

The second idea about behavior contracts concerns how to deal with the challenging behavior. It shouldn't be a big deal if the student doesn't reach the goal in the contract. The instructor's comment should be like, "Oh, too bad – you didn't do it this time, but that just means it's time to start working on the next one." It's generally of little value to make people feel bad about engaging in the challenging behavior; our attention should stay focused on achieving the desired behavior.

The third idea has to do with how we talk about the contract. It shouldn't be used as bribery, which is – at best – a short-term solution. One of the most effective ways to handle talking about the contract is to set up environmental events or stimuli to prompt the behavior. A check-off sheet that can be reviewed for accomplishments of routine tasks is a great way to do this. For example, John needs to clean his work area. Staff requests for cleaning are setting events for challenging behavior. On the other hand, John is very interested in the reinforcers in his contract. A card with a picture of tasks that must be checked off by staff as they are done can be a very effective way to handle these prompts.

Finally, a great idea for all contracts is to develop the type of fading steps discussed earlier, with the idea that the individual will begin to manage his own behavior. For example, John might begin to mark his own card with some spot checks for accuracy.

Summary

This chapter has highlighted steps that can be taken to replace challenging behaviors with more appropriate ones. The first steps in this process are to pinpoint the behavior and to determine what function it serves for the person. Next, you must select an alternative behavior you intend to teach the individual. Choosing behaviors that are easy to learn, acceptable to others, and serve the same function as the challenging behavior will be most effective.

Once you've taught the alternative behavior, you must turn your attention to managing the reinforcers that surround the behavior. This can be done by adding or limiting reinforcement and/or by using differential reinforcement to reinforce positive behaviors while ignoring challenging ones. Regardless of which strategy you decide to use, it's important to be patient with yourself as well as the individual with whom you're working. Change is a slow and difficult process which, through time and hard work, can be very rewarding.

Questions to Ponder

- You're working with a student who constantly gets out of her seat. How could you use differential reinforcement to reinforce an alternative while ignoring the out of seat behavior? What alternative behavior would you choose?
- John has just been hired at a local hardware store. Everyday after lunch he sits down and refuses to work. This behavior generally lasts about thirty minutes. His employer doesn't know what to do and asks for your assistance. What do you do in this situation?

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Chapter Five

Using Behavioral Interventions with Students

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Introduction

In the previous chapters, we've defined behavior, identified strategies to understand and respond to behavior, and discussed the importance of using positive strategies to support challenging behavior. This chapter provides students with information regarding laws which identify procedures that can and cannot be used to address those challenging behaviors exhibited by individuals with disabilities.

Upon completing this chapter, students will be able to:

- Demonstrate an understanding of the difference between exempted, prohibited, and regulated procedures.
- Demonstrate how to use regulated procedures.
- Demonstrate an understanding of the steps to take in an emergency situation.

Section 1

Using Behavioral Interventions with Students

In 1989, the Minnesota State Board of Education was directed by the legislature to adopt rules governing the use of aversive and deprivation procedures for pupils with disabilities. Aversive procedures use negative or unpleasant stimuli or consequences to stop a behavior. Deprivation procedures delay or withdraw goods, services, or activities that the child would otherwise receive if an identified behavior occurs or in an emergency situation

The Board was asked to draft rules to promote the use of positive behavioral interventions, and to ensure that aversive or deprivation procedures, when appropriate for a student, are included in that student's Individual Education Plan (IEP). The rule, which went into effect in January 1992, is intended to encourage the use of positive approaches to modify students' behavior.

Three categories of behavioral interventions – exempted procedures, prohibited procedures, and regulated procedures – are listed in Minnesota's Proposed Permanent Rule for Use of Behavioral Interventions with Pupils Who Have Disabilities (MN Rule 3525.2925).

Each school district must revise district policies, where necessary, and to provide any necessary staff development to appropriately implement the new rule. Each district should distribute their written discipline policy during IEP meetings, and review common practices in terms of appropriateness for a particular student.

Disadvantages of Aversive Procedures

First of all, aversive procedures can result in behaviors that are worse than the original ones. For example, if you restrain someone from hitting him- or herself, you could inadvertently teach that person to become aggressive. This is a frequent result of restraints from self-injury. If the person engaging in self-injury accidentally strikes a staff member who is using a restraint, that staff person might let go. This could reinforce hitting. The positive approaches we will go over in this course don't carry this danger.

In fact, positive procedures can teach many useful new behaviors. For example, a young man named John, living at a group home, used to throw his food several times per day. A perceptive staff person noticed that whenever John disliked one thing on his plate, he would throw the whole plate. The program staff at the group home were then able to write a program to teach John to sign "eat" when staff offered him each food item separately. When John learned this new skill, he stopped throwing his food. Another advantage of positive approaches is that even if the program doesn't work, you aren't much worse off than when you started. If staff had guessed incorrectly and John continued to throw his food, they would always have the option of trying something else.

Another disadvantage of using aversive procedures is that they're difficult to fade because they're artificial in nature. We talked last time about using natural cues and reinforcers when teaching. If you use an electric shock to keep someone from biting, the procedure will only work if you still have the shocking device in sight. Positive approaches can result in natural reinforcers that will last longer. When we taught John to sign "eat" for every food item, we not only decreased his throwing behavior, but we provided him with a natural reinforcer of food. Eventually, we could teach John to serve his own food, and make the program even more natural, and increase his independence. If we had used a punishment procedure, we would have to use the procedure over and over again, with no room for independence; John would always need to have a staff by him, ready to punish.

A related disadvantage of punishment procedures is that sometimes what we think are punishers can actually be reinforcers, or can become reinforcers over time. Restraints such as arm braces or helmets or physical holds can be very difficult to fade for this reason. Individuals could also use restraints to get out of an activity. For example, a child who doesn't like gym class might act out in order to get into a time-out room.

Positive procedures, on the other hand, are easier to work with on a trial and error basis. If one procedure doesn't work, you can try another and another until you find the right solution. We will go over many examples of positive approaches to try later on. You often don't know if a punishment is going to be reinforcing until you've tried it, and then it might be too late. For example, the child trying to get out of gym class may act more and more inappropriately until time-out or another restrictive procedure has to be used for safety purposes.

A fourth disadvantage of punishment procedures is that the people who perform the procedure can become associated with the procedure itself. This can make developing relationships with staff and teachers very difficult for the person. When this happens, it becomes harder and harder to use a positive approach. On the other hand, positive procedures can result in positive interactions with instructors, peers, and others.

Finally, punishment procedures don't address the function of the behavior. We will go over this concept in much greater detail very soon. Punishment may decrease one behavior, but if that behavior serves some need for the person – and almost all behavior does serve some need, or function – then other inappropriate behaviors might arise to serve the same need. Positive approaches can teach the person to communicate his or her needs in more appropriate ways. We will have many examples of this later on.

Rule 40 and the "Education Rule"

This doesn't mean that punishment procedures are never appropriate. When we do use punishment procedures in Minnesota, though, we have to follow specific rules and guidelines. As mentioned before, for adult and residential services, this rule is called "Rule 40" and in the schools, we will call it the "education rule".

Rule 40 was developed in 1987 order to prevent the misuse of procedures that were seen as abusive, dangerous, or dehumanizing, and to promote positive approaches to managing behavior. Later on, the education rule was added for the same reasons. According to the Department of Human Services, Rule 40 has resulted in a decrease in the use of aversive procedures in Minnesota, and an increase in positive procedures. The education rule should result in many of the same changes. The education rule is relatively new, but, as we have seen with Rule 40, once people get used to this way of thinking, most providers find that positive approaches work best. Positive approaches to behavior management will be the focus of most of this course.

Exempted Procedures

Exempted procedures are planned instructional techniques which are common practices in schools, and consistent with the school discipline policy. Exempted procedures may include, but aren't limited to:

- The use of corrective feedback and prompts – visual, verbal or physical cues, correcting errors, etc.
- The use of physical assistance to facilitate the completion of a

response (such as guiding a child's hand to teach a handwriting skill where there's no resistance).

- Requesting that a student leave an activity for a brief period of time, or the temporary delay or withdrawal of goods, services, or activities as a consequence of their inappropriate use.

Exempted procedures would appear on an IEP when they are used as instructional techniques to help a child meet IEP goals and objectives.

Prohibited Procedures

Prohibited procedures are those procedures which, under Minnesota law, have been declared illegal for use in schools with children who have disabilities. Such procedures may never be used by teachers or other school staff. Since they are expressly prohibited, they would never appear on a student's IEP.

The following procedures are prohibited in Minnesota for use with students who have disabilities:

- Corporal punishment – hitting, spanking, etc.
- Requiring students to stand or sit in a position causing physical pain, the use of intense sounds, lights or other sensory stimuli as an aversive stimulus.
- The use of noxious smell, taste, substance or spray as an aversive stimulus.
- Denying or restricting a student's access to equipment such as hearing aids and communication boards.
- Faradic skin shock.
- Totally or partially restricting a pupil's auditory or visual sense.
- Withholding regularly scheduled meals or water.
- Denying access to toilet facilities.

Regulated Procedures

Regulated procedures are any interventions used in a planned manner that meet the definition of an aversive or deprivation procedure (see the Definitions list in Appendix A). Regulated procedures may be permitted as instructional strategies only when positive or less intrusive methods of encouraging behavior change have been tried without success. Any regulated procedure under consideration must be clearly articulated in a Behavioral Intervention Plan (BIP), as part of a student's IEP, and can be implemented only with the signed consent of the parents or in an emergency situation. Regulated procedures include:

- The use of manual restraints.
- The use of mechanical or locked restraints (e.g., handcuffs).

- The planned use of suspension or dismissal from school.
- The use of time-out (where the student is removed from the educational program and may be placed in an isolation room or similar space).
- The temporary delay of regularly scheduled meals or water not to exceed thirty minutes (except in an emergency).

If a regulated procedure is being considered for use with a student who receives special education services, a professional with expertise in the use of positive approaches to behavior management must be a member of the IEP team.

Time-Out

One of the most frequently used regulated procedures is time-out. Exclusion time-out occurs when a child is removed from his or her regularly scheduled educational program. Seclusion time-out is when a child is placed in a specially designed isolation room. The use of time-out must be addressed in a Behavioral Intervention Plan as part of a child's IEP. A time-out room must have an observation window for continuous monitoring, have smoke and fire monitoring devices, be well lit, clean, heated, and ventilated, and must measure at least five by five feet.

Assessment

An assessment must be performed before any regulated behavioral interventions are recommended or initiated. The assessment must examine the purpose of the intervention, the effect of the behavior exhibited by the student, and its seriousness. The assessment summary must describe:

- The behavior for which a regulated procedure is recommended.
- A baseline measurement of the behavior.
- Documentation of two positive behavioral interventions, and any extra interventions attempted and their effectiveness.
- A review of frequent use of exempted procedures (e.g., sitting in the hallway or being sent to the principal's office).
- Documentation that other treatable causes for the behavior have been ruled out (health, medical, etc.).
- What alternative procedures have been considered and ruled out and why; *and*
- A description of the proposed regulated procedure.

Positive Behavioral Interventions

Before any regulated behavioral intervention can become a part of the IEP, the school must: document that it has tried and was unsuccessful with positive approaches to manage the offending behavior, and show that the purpose of the intervention is to enable the student to develop appropriate skills. (The use of regulated procedures should not be considered to eliminate unwanted behaviors, or for the convenience of staff.)

If the two positive behavioral interventions have not been successful in meeting the IEP goal a team meeting must be convened to review the student's IEP. If the IEP team decides that the use of a regulated procedure is necessary to meet the goal, the procedure must be written into a Behavioral Intervention Plan (BIP) in the IEP. The BIP must list:

- The target behavior and a baseline measurement of its frequency and severity.
- A description of the proposed behavioral intervention procedure.
- The conditions under which the procedure will be used.
- An explanation of why the procedure was chosen.
- A statement of expected behavior changes that will occur.
- A description of any discomfort, risk or side effects.
- The conditions or circumstances under which the intervention can or must be discontinued prior to team review.
- The anticipated effects on the student if the procedure isn't used.
- Who will implement the program.
- The team review and evaluation date, not to exceed two months.
- Coordination with home or care facility; and
- The parent's informed consent (which may be withdrawn at any time by notifying the program administrator; the procedure must be stopped immediately upon parental request).

Parental Consent

Parents must be contacted within three days of their having withdrawn consent to the Behavioral Intervention Plan in the IEP, to determine the need to review and amend the BIP and the need to convene an IEP meeting for a change in placement or program. If parents are divorced but have joint legal custody, informed consent must be obtained from both parents before using a regulated procedure.

Independent Review Committee

An Independent Review Committee must be available in each district as an option for either parents or school staff, to review the Behavioral Intervention Plan (BIP). The team must contain at least two members who are not employees of the district. Parents may appoint one member of the team, if they desire. Districts must inform parents of their right to request a review; the responsibility of the committee is to review relevant assessment and make recommendations regarding the Behavioral Intervention Plan. The decision must be a provision for continuous monitoring of the child during time-out, the criteria for the child's return to his regular activities, access to water and restrooms if time-out exceeds fifteen minutes, and documentation of the number of occurrences of time-out and the length of time for each time-out. Time-out rooms must be safe for children, with walls and floors covered to guard against injury. Light switches must be outside. The Review Committee is advisory only and has no power to override the decision of the IEP team; it should be viewed as a "second opinion" when either the parent or the school has concerns regarding the planned interventions for a particular child. The committee must include persons who are knowledgeable about cultural and ethnic issues as well as about behavioral interventions.

Activity: Assessment Summary Checklist

Working in small groups, address the items in the checklist below. Responses may be based on an imaginary student or loosely on students with whom you've worked. If you choose to base your responses on real students, keep all names confidential.

- What is the behavior for which a regulated procedure is recommended?

- Describe two positive behavioral interventions you completed to address this behavior. How did they work? How did you document them?

- Provide a list of all frequently used exempted procedures (e.g., sitting in the hall way, being sent to the principal's office)

- What other treatable causes for the behavior have been ruled out (medical, environmental etc.)

- What procedures heave been considered and ruled out and why?

____

____

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- Provide a brief description of the proposed regulated procedure.

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Section 2

What to Do in an Emergency

In the case of emergencies, regulated procedures may be used to protect a student or other person from injury, emotional abuse, or to prevent severe property damage, even if those procedures are not written into the IEP however, emergency procedures that are used twice or more per month require that a team meeting be called to see if the IEP continues to meet the needs of the child.

Any time a regulated procedure is used in an emergency (any time that its use hasn't been planned in the IEP), district administration and parents must be notified immediately. Here's a hierarchy of seven steps in determining what to do in emergencies.

Follow the Written Program Plan

The first step is to always follow or attempt to follow the written program plan before trying any other type of intervention. You should vary from the written plan only in extreme cases. If you see instances where the program plan isn't working, you should bring this up so that new programs or efforts can be tried consistently.

Ignore the Behavior

If there is no plan, or if the plan doesn't work, the safest course is to ignore the behavior. This can help insure that you don't reinforce the behavior, if the person is trying to gain attention, and poses the least risk to you and to the other person.

Use Non-Verbal Strategies

If you must respond to the behavior, try a non-verbal strategy first. Position yourself between the person who is upset and other vulnerable persons in the room. Keep an alert posture with your arms at your sides, feet apart, knees slightly bent, and ready to move in any direction.

Use Simple Verbal Cues

Try verbal engagement or redirection. For example, if Gerald is getting very upset, you could ask him if he wants to sit and read a magazine (if this is something he enjoys). You're usually better off if you can direct the person to a positive activity. It's very important to remember to keep your verbal cues to a minimum; use short and direct sentences. For example, say, "Sit," or "Sit on the couch," rather than, "I know how upset you must be right now, so sit down on the couch and relax a little, and when you're calmer we can talk about what's bothering you."

Use an Escort

Next, you might have to use a physical escort to remove the person from the area. If the person resists, this could count as a manual restraint under Rule 40 and the public school rule.

Use Manual Restraints

You can use manual restraints if this is the only way to keep the person who is upset and other vulnerable persons safe.

Call for Emergency Services

If all else fails, you can call 911. This should only be used as a last resort.

Provided by PACER Center, Inc., 4826 Chicago Ave. S., Minneapolis, MN 55417, 612/827-2961. Refer additional questions you may have to PACER Center.

Summary

This module has focused on positive approaches of dealing with individuals' behavior. A main reason for focusing on positive approaches is that regulated and restrictive procedures don't address the function of the behavior. In other words, the person is trying to communicate with his or her behavior. Simply punishing one behavior won't make the underlying communication problem go away. Positive approaches are better able to teach the person how to communicate his or her needs effectively for long term changes.

There are times, however, when it's necessary to take quick and more extreme measures with students who are exhibiting challenging behaviors. Examples of such times would be if a student is threatening to hurt him- or herself or someone else. In these cases, it's important to know exactly what behavioral interventions you may or may not use. If you're not already, become familiar with your school or organization's policies regarding behavioral interventions and how to use them

Questions to Ponder

- Your supervising teacher is using time out with a student to reprimand him for his talking out behavior. You know that this procedure hasn't been discussed by the team and is definitely not written into his individual education plan (IEP). What do you do?
- You see two students involved in a heated verbal argument in the hall, what do you do?

Appendices

69 **Appendix A: Definitions**

Appendix A
Definitions of Controlled or Regulated Procedures

The Use of Manual Restraint

Restraints are the most commonly used controlled procedure. Restricting a person's movement using physical force is manual restraint. This includes escorts, such as having two people walk someone from the classroom to the hallway. There are two things to remember if you're using physical contact. First, it may only be used if the person is resisting, and second, Rule 40 specifies that if the contact lasts for sixty seconds or longer while the person resists, it's a restraint.

For example, Ben doesn't like to brush his teeth, so two staff people drag him to the bathroom while he is pushing away, shouting, and swearing. This is an inappropriate use of a manual restraint. It's not a life-threatening emergency, and certainly would *not* be an appropriate procedure to use as part of a person's program plan.

The rules do allow a certain amount of brief physical contact in the natural flow of daily activity. For example, Tim comes out of his room biting his hand, a sure sign that he's about to aggress, and you briefly take his arm, turn him around, and tell him to look at magazines – an activity he enjoys. However, holding Molly's hands behind her back for ten seconds every time she hits herself as part of a program plan would be considered a manual restraint and would have to follow all of the procedures to be included as part of her individual education or program plan.

In adult services, the use of manual restraint is much easier to identify than with young children because greater physical force is needed with adults. One common mistake is to think that restraints for small children are O.K. because they don't require a great deal of physical effort to hold. If the child is resisting, however, it's still a restraint. Holding a child or an adult immobile doesn't teach him or her anything, and should be limited to only the most severe cases. Improper restraints have caused broken bones, torn ligaments, and even death. You should never perform a restraint unless you have had specific training.

Mechanical or Locked Restraints

According to the training manual on the education rule, "mechanical or locked restraints are at times used to stop a pupil's pattern of behavior that is serious and poses a high risk of injury to self or others. Restraints such as mittens, Velcro cuffs, and similar devices should only be used under the most serious of circumstances and with assurances from the pupil's physician that it's safe to use such devices. Best practice suggests that the intervention plan include the methods to be used to fade out the use of restraints," (Minnesota Department of Education, 1992).

The Planned Use of Suspension or Dismissal

In the public schools, the planned use of suspension or dismissal from school is also regulated. This type of intervention can only be used as part of the student's Individual Education Plan. There are other federal and state laws regarding suspension that your district should know. What you need to know is that sending a student home from school is a serious issue, and your school should have policies to deal with this.

The Use of Time-Out

"Time-out" is short for "time-out from positive reinforcement." Time-out procedures can be from mildly intrusive exempted procedures to highly intrusive prohibited procedures. This type of intervention has been the subject of a great deal of controversy. You cannot use time-out as an emergency procedure: it has to be part of the persons individual education or program plan. Persons must be monitored at all times when in time-out, and all uses of time-out must be documented. Isolation rooms must meet certain safety requirements. The training manual on the education rule documents a number of issues to consider with the use of time-out:

> "Time-out isn't appropriate for all pupils or all problems. Research on the use of time-out documents positive effects across a wide variety of behavior problems. There is also long-standing and perhaps growing controversy regarding the misuse and abuse of time-out...
>
> "Time-out may be ineffective or even paradoxical in that it can serve an avoidance function, or as negative reinforcement, by providing a means for a pupil to avoid another activity that he or she perceives to be aversive or undesirable. For example, pupils who have difficulty with certain academic work or social situations may act out in order to escape. The use of time-out in these instances may actually reinforce and ultimately increase such behavior. In other instances, time-out may provide opportunities for pupils to engage in more reinforcing behaviors like self-stimulation.
>
> "Time-out can be harmful. For example, some pupils, when placed in time-out, engage in self-injurious behavior and if left unsupervised will harm themselves. In other instances, the process of escorting an angry, aggressive pupil

> to time-out may place the pupil and/or the staff at risk of injury. Finally, time-out could be implemented in a manner that is harmful to pupils due to the degree of exclusion. The worst case would be where pupils are left in isolation rooms for extended time periods, even hours. There are no absolute time limits on the use of isolation or exclusion procedures but the most effective time-out procedures are very brief, lasting five minutes or less..."
>
> *Minnesota Department of Education, 1992*

Some of the milder forms of time-out are exempted. For example, planned ignoring or extinction programs are one form of time-out that isn't considered a regulated or controlled procedure. We have already talked about contingent observation and temporary interruption. This is when you take a person away from an activity to a place where they can still observe others engaging in the activity and receiving reinforcement. According the training manual on the public school rule, "time spent with other persons doesn't necessarily fit the definition of time-out as removal from reinforcement opportunities. Exclusion of pupils from their class in this way may serve to provide an immediate alternative instructional and learning opportunity" (Minnesota Department of Education, 1992). Another exempted procedure similar to time-out is the use of a "quiet room," where the person chooses to go to an area in order to regain self-control. As long as the person chooses when to go and when to come out, it's not a controlled procedure.

Rule 40 distinguishes between *exclusionary* time-out and *room* time-out. In exclusionary time-out, the person is removed from an ongoing activity, but not necessarily to a special time-out room. A person's bedroom, or living area where the person can not engage in preferred activities or leave when he or she wishes could all be forms of exclusionary time-out. Room time-out, sometimes called separation, involves removing a person from an ongoing activity to an unlocked room. Under Rule 40, the door to this room cannot be locked, but it can be blocked by staff persons.

We really don't have time to explore this issue in depth, but we can go over a few examples. Ralph, who is mainstreamed into a third grade classroom is becoming very upset because he doesn't understand what is going on with the unit on reading. The aide removes him from the class and goes to another small room with fewer distractions to work on reading at his own pace for a while. This isn't time-out because someone is with him, and he can still earn positive reinforcement. Another example might be when Janet is at her workshop and tips over a table with her work materials. The staff person directs Janet away from the activity where she can watch the other people at the workshop receive reinforcement for working. This isn't a regulated or controlled procedure because it's seen as a milder form of time-out. It should still only be used as part of a planned program for the person. Consistency is very important, and this type of intervention could pose serious problems if used in an unplanned manner. Use of a time-out room where the person is forced to go to a specific area and not allowed to leave is only one form of the regulated use of time-out. If you work at a group home, and tell Julie to go to her room because she has been yelling at her roommate and you don't let her leave when she asks, this can still be considered a time-out.

We have already mentioned under *prohibited procedures* that you must give a person access to a bathroom after fifteen minutes in time-out.

Withdrawal of Goods, Services, or Activities

According to the public school rule, temporarily withdrawing goods, services or activities is exempted only if the person was using them inappropriately, and then only for a few minutes. Rule 40 is more specific in that the planned use of withdrawing a person's access to goods, services, or activities is a controlled procedure. An example of this type of procedure would be to take away Hillary's radio when she screams. Another example of a deprivation procedure might be when Joe becomes aggressive on a day that he has plans to go out for dinner. It would be O.K. to wait until Joe calms down to leave for the restaurant, but it's not O.K. to tell Joe that because he has aggressed, that he now can't go out at all. If Joe shows a definite pattern of becoming really disruptive at the restaurant after an aggressive incident, the team might decide to use a controlled procedure in not allowing Joe to go to restaurants as part of his individual plan.

The Temporary Delay of Regularly Scheduled Meals or Water

The last controlled or regulated procedure under the education rule is the temporary delay or withdrawal of regularly scheduled meals or water not to exceed thirty minutes. If you're going to withhold a person's meal or beverage for longer than a few minutes, it has to be part of the person's individual program or education plan. You cannot deny someone a regularly scheduled meal or water for longer than thirty minutes.

Other Controlled Procedures

Rule 40 has two other controlled procedures not covered by the public school rule. These are:

- **Positive Practice Overcorrection:** This is a procedure that requires a person to demonstrate or practice correct forms of a behavior for a length of time or a rate that is greater than normal. For example, making a person stack sixty chairs for throwing one. Or making a person practice "shaking hands" with everyone in the room for striking one person.

- **Restitution Overcorrection:** In this procedure, the person is made to return the environment to a condition better than when it started. For example, if Jenny writes on her desk, making her clean *all* the desks, or if Fred spills his milk, making him clean the entire kitchen.

References & Resources

References & Resources

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